Louisiana
Department of Transportation
And Development

Lafayette
Metropolitan Planning Organization

Lafayette Consolidated Government
Traffic & Transportation Department
Metropolitan Planning Organization
Comprehensive Planning Divison

2030
Transportation Plan

DEMOGRAPHIC METHOD, PROJECTIONS, AND SURVEY

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Project No. 26210-014-017-01-04-03-02
May 5, 2005
Edition 3.2

0.0 Executive Summary

This summary is written for you, the public, in mind. We, the MPO Staff, are writing to you so that you can understand how and why we went about counting people and workers in the Lafayette area.

This is a very technical topic, but we hope to convey to you the essential points in this introduction. If you want to pursue the technical details, there is probably more than enough to satisfy your curiosity.

This report describes your future and the future of your children because where people live and work effects their lives in many ways. If we understand where people live and work, we can make good decisions not only about where to build roadways, but also other things that are important, like schools, libraries, hospitals, and businesses.

You can understand, we hope, that transportation is not just about roadways, but also about the people who use the roadways. In doing this work, we are seeking to maximize the tax dollars so that we can build only those roads that people will actually need built.

So here goes: just the essential points.

0.11 How many roads do we need to build?

To answer that question, you need to know where people will live and work in the Lafayette Metropolitan Area.

Once you know where people live and work, you can say how many roads they need.

It's that simple.

0.12 How many people will live and work in the metro area?

218,895 people were counted individually during the 2000 census by the federal government. By year 2030, we estimate that 270,203 people will live in the same area.

By 2030, the metro area will be much bigger. It would not surprise us that there will be 500,000 people living and working in this expanded area. How big an area will be determined in 2010 and 2020 when the decennial census is performed.

We only estimated what will happen in the metro area as it is now in 2000: all of Lafayette Parish and rural parts of Acadia, Iberia St. Martin, and Vermilion Parishes. This area includes the following incorporated municipalities: Breaux Bridge, Broussard, Carencro, Duson, Lafayette, Maurice, Scott, and Youngsville. The City of Lafayette is consolidated with the parish government being known as the Lafayette Consolidated Government.

0.13 Where will people live?

We have divided the metro area into 599 Traffic Analysis Zones (TAZ's). These are essentially neighborhoods being bounded by major arterials, railroads, and streams (bayous, rivers, coulees, canals, and ditches).

We have estimated the number of people living, working and going to school in each of these TAZ's.

0.14 How did we count and then estimate where people live?

We used the official US Census Bureau estimates for 2000 and then projected them for 2010, 2020, and 2030. Since the Census bureau did the count, nearly every one of these persons were identified and counted separately.

To project where people will live, we used the official estimates used by the state of Louisiana to estimate expenditures in the coming years. We looked at these numbers and modified them just a bit based on recent trends that were occurring. Here are the estimates we used:

Year 2010 = 245,619 people
Year 2020 = 270,203 people
Year 2030 = 292,596 people

We looked at how many women were of child bearing age and how many elderly people lived in each zone. Based on these numbers, we estimated how many people would be born and how many people would die. These are the same figures used by life insurance companies to estimate longevity.

We also looked at how many move in and move away from Lafayette using their age and gender as guidelines.

Using birth, deaths, in-migration and out-migration, we classified each of 599 TAZ's as kinds of neighborhoods that have different growth rates.

We also looked where there was undeveloped land and large transportation projects that would enable people to build large subdivision and commute to Lafayette. We located these tracts using aerial photographs taken in 1998 and 2001.

If you want to see on a map where this population growth will take place, you can look at Maps 9-1 and 9-2. The first map (9-1) has only birth and deaths. The second map (9-2) has birth, deaths and migration show. Flip back and forth between the maps and you will see zones generally changing from yellow to blue. When it changes from yellow to blue, that shows where people will move and that were we expect the most population growth.

0.15 How did we project where people will work?

We looked at employment records from the Louisiana Department of Labor for 2000 and 2002 for each and every business in Lafayette Parish, some 100,000 businesses in all. We used the employers' address and tried to put a dot on a computer map for each business. We actually located 75% of all workers this way. When we could not locate a business, we estimated where the other 25% of the workers would be employed using the kind of business it was in (standard industrial code). We did a random sample of the records to see how well we had placed all of the workers in the parish. We determined that 96.2% (plus or minus 2.67%) of the workers were assigned to the correct zone.

We looked at the kind of business each employer was doing. We then looked at the probable growth rates of each of these kinds of business. We also looked at how far away people travel to do business and shop in the Lafayette area. We developed a factor for each employment sector and then multiplied it find how big the business sector might be in the coming years.

We did sums within each of the 699 TAZ and used that number to estimate how many people work in retail and all other sectors combined.

0.16 How did we use these figures on where people live and work?

We used these figures in formulas developed for Lafayette. The formulas estimate two things:

- Attractions: how many trips are produced in each zone
- Productions: how many trips end in each zone.

Imagine a giant ledger in which every zone has the number of trips going and coming to each other zone. We measured the distance and the road capacity to create a computer map of every major roadway in the metro area. The computer map was used by a computer program called TransCAD. The program made the assumption that traffic will flow like water. The trips, like water, will flow using the shortest distance and the lease resistance between any two points.

0.17 How long did all this take?

It was a big project that consumed some of the time of the staff of Metropolitan Planning Organization for five years. We also hired on a part time basis three consultants who were experts in this area for 2 years. The work you are now reading took thousands of hours of work.

We knew that this work was important because transportation effects most people lives. We also know that this work will be of use to a lot of other people. Other government

professionals, like the fire, police and electrical departments, need to know where they need to build for the future development of the parish. We also need to build public institutions like schools and libraries. Business people also might need to know where people will live and work so that they can make investments that will create jobs.

0.18 How much did this cost?

This project was very expensive. The federal government gave us a grant totaling about $400,000. Before the Federal Highway Administration spends money on local projects, it wants to be assured that the money is being spent wisely and where it's needed.

0.19 Who were the people who worked on this demographic project?

This work is a collaboration between Dr. David Johnston and the planning staff of Metropolitan Planning Organization.

Dr. David Johnston recently retired from the University of Louisiana. He taught for more than 20 years and schooled a whole generation of planners and geographers in southwest Louisiana.

When he retired, he authored parts of this volume and shared the results not in an academic forum, but with the people of Lafayette so that it might be put to use. His work is found in Chapters 1, 2, and 3. His primary responsibility lies in interpreting the 2000 census data as well as the 2000 school attendance and employment survey. All of the projections and the method by which he made are also his original work.

The MPO staff authored this executive summary you are now reading as well as chapter 4 dealing with the employment survey. The MPO staff also compiled the base 2000 census data as well as collected the 2000 school attendance and employment survey.

This multivolume work and two remaining volumes were produced by the MPO staff using the information produced by Dr. Johnston. These two volumes contain 44 maps and five statistical tables of nearly 100 demographic variables.

The names of the MPO staff people who worked on the project are:

- Tony Tramel: Department Head
- Mike Hollier: Planning Manager
- Mike LeBlanc: Project Coordinator, Mapper, Employment Surveyor, and Editor
- Vijay Kunada: Mapper and Traffic Modeler
- Brenda Deshotel: Employment surveyor
- Claire Connolly: Employment surveyor
- Scott LaFleur: Mapper and Employment Surveyor

The names of the consultants working on the project were:

- Dr. David Johnson, Demographer
- L.P. Ledet, Project Coordinator
- Raju Porandla, Traffic Modeling

0.20 Chapters and Appendices

This work is composed of four main chapters and three appendices.

Chapter 1: Demographic Projections,
Chapter 2: Population and Dwelling Units Methodology;
Chapter 3: Employment and School Attendance; and
Chapter 4: Employment Survey.

Chapter 1 describes the projected population and dwelling units by parish and region.

Chapter 2 deals with the methods of projecting population and dwelling units.

While Chapter 3 and 4 both deal with employment, Chapter 3 describes how the data is analyzed while the final chapter contains a description of how the employment data was collected.

The work has three appendices:

Appendix 1: Graphs of Variables for Study Area

Appendix 2: Graphs of Variables by Region

Appendix 3: Inventory of Demographic, Maps, and Formulas

0.3 Section Numbering

Each of these four chapters is divided and then numbered into sections and subsections with digits separated by periods. The numbering system conforms to these designations:

Chapter: the first number
Section: the second number
Subsection: the third number

Thus, 2.3.4 is chapter 2, section 3, and subsection 4 as listed in the Table of Sections (beginning on page 2) as "Exceptions to the Survival and Birth Rates".
A table is numbered by the section in which it occurs. If more than one table is presented then the numbering uses a sequence separate by a dash as in -1, -2, -3 … .

The name and table number of each table is listed in the Index to Tables following the Table of Contents

0.4 Multivolume Work

The 2030 Plan is a large project. This document deals with only demographic projections (how many live and work) in Lafayette.

This volume is part of a comprehensive demographic work of in four parts: text, maps, and tables.

1) This text volume contains primarily discussion and description of the demographic projections, methodology, and survey.

2) A set of 44 maps was produced in two printed formats. The first format is 11 inches by 17 inches while the second format is larger being 24 inches by 36".

3) A set of 5 tables was also printed in a single 11 inch by 17 inch format.

4) A spreadsheet with all of the 100 or so variables listed as columns and each 599 traffic zones listed as a row.

0.5 Official Citations

The official citations of these works for academic and government reporting purposes is:

Lafayette Metropolitan Planning Organization

2005	2030 Transportation Plan: Demographic Method, Projections, and Survey. Lafayette Louisiana: Metropolitan Planning Organization
2005	2030 Transportation Plan: Demographic Maps of the Lafayette Metropolitan Study Area Lafayette Louisiana: Metropolitan Planning Organization
2005	2030 Transportation Plan: Demographic Statistical Tables of the Lafayette Metropolitan Study Area. Lafayette Louisiana: Metropolitan Planning Organization
2005	2030_demo_map _inventory_1-15: Check Sum 2005_05_04 (MS Excel format) Lafayette, Louisiana Lafayette Metropolitan Planning Organization

0.6 Digital Publication

We are seeking to distribute this multivolume work as widely as possible.

We know that the demand for this work will be diverse and not everyone will want a paper copy of each and every text document, table, map, and spread sheet. In order to save distribution and printing cost, we have converted this entire work to digital publications.

All of the digital products cited above are available from the Lafayette in a Century Web site in the demographic section:

http://www.lafayettelinc.net/mpo/demo/intro.asp

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3.0 EMPLOYMENT AND SCHOOL ATTENDANCE METHOD

4.0 EMPLOYMENT SURVEY

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1.0 DEMOGRAPHIC PROJECTIONS

1.1.0 INTRODUCTION

Moderate, sustained growth is expected in the Lafayette Metropolitan Area Study Region through the year 2030. The region's population, dwelling units and employment are each projected to increase by over thirty percent from the year 2000 to 2030. All totals are arrived at by separately analyzing each of the 599 Traffic Analysis Zones (TAZ). The projections are done in ten year intervals. Significant growth is seen in all directions from Lafayette. The growth rate declines slightly over the length of the projection, though there are some outlying regions which have their greatest growth during the 2020 to 2030 time period.

1.1.1 Population and Dwelling Unit Methodology

The projection results are a culmination of applying many appropriate demographic methodologies (see Chapter 2: Population and Dwelling Unit Methodology for details). The population of each TAZ is aged to determine the expected number of deaths each decade. Birth rates relevant to each TAZ are applied. In and out migration and the ages of those migrants are estimated by viewing past trends. Past growth in number of dwelling units is analyzed and actual growth in dwelling units through 2003 incorporated. Assumptions are made regarding expected new housing units and the associated number of migrants expected. Areas of very recent growth are assumed likely to continue growing if available land for development exists. Growth is deemed more likely adjacent to areas already developed, areas with utilities and infrastructure already present. Growth is assumed more likely in accessible areas, areas with transportation links – and much less likely in environmentally sensitive areas.

1.1.2 Employment and School Methodology

Employment is projected separately for three distinct employment sectors, using different methodologies for each (see Chapter 3: Employment Methodology for details). Retail employment growth is directly related to population growth. Regions of greatest population growth can expect significant employment growth. It is assumed, however, that retail employment in all parts of the study area will grow at least modestly, even with very little or no population growth in the immediate area. All parts of the study area should benefit from the overall population growth. Non-retail employment does not directly depend on the population growth in the immediate area, and thus is more tied to the overall growth of the region. Most of the categories are expected to grow at approximately the same rate as the population in the study area. Several specific industry categories, such as finance, medical, government and computer related services are expected to grow slightly faster than the rate of population growth. School attendance is driven solely by the population projections. Thus, the school attendance numbers directly lead then to employment projections in education.

1.1.3 Geographic Levels of Analysis

An analysis of population, dwelling unit and employment projections is conducted at four basic geographic levels. First, interpretation of the projection for the entire study area is presented. Then results are analyzed by region, by subregion and TAZ. Some results are also summarized by parish.

The study area is divided into five large regions (see Map 13-2). Central Lafayette includes the area bounded by Interstate10 to the north, the St. Martin Parish border to the east, the Vermilion River to the south and Ambassador Caffery Parkway to the west. The North Region includes all the TAZs north of Interstate10 (including all of Acadia Parish). The East Region includes much of St. Martin Parish south of Interstate10. The far south section of St. Martin Parish is in the South Region, which includes those TAZs south and east of the Vermilion River. The West Region includes the remainder of the TAZs which are west of Ambassador Caffery Parkway. Thus, interpretation of projections utilizes five regions – North, South, East, West and Central Lafayette. Comments and summary statistics are presented for these five regions as concerns all of the major projections discussed.

The five regions have been further subdivided into twenty-eight subregions (see Map 13-1). The subregions do not cross parish boundary lines. Thus, separate subregions exist for Acadia, Vermilion and Iberia Parishes. Many of the subregions center upon municipalities – such as Breaux Bridge, Broussard, Carencro, Scott, Milton and Youngsville. Major transportation routes such as Interstate 49, Ambassador Caffery Parkway and Johnston Street help to further subdivide the area. Subregions are frequently highlighted in the interpretation of results. For retail employment, the study area has been divided into a different set of subregions, each one focusing on a retail entity. Instead of major transportation routes being used as dividing boundaries, they now frequently form the core of a retail service area (such as Johnston Street). Parish municipalities also serve as cores of retail service areas. Retail service areas are presented in Map 11-1.

The fourth geographic level of analysis is the TAZ. All projections are based on TAZ level data. Specific TAZs are commented upon to provide illustrations of generalizations being made and to highlight those TAZS which are markedly different from other nearby TAZs. The TAZ numbering system is found in Map 1-1.

1.2.0 POPULATION AND DWELLING UNIT PROJECTION ANALYSIS

The projection of dwelling units is accomplished first. The results are then incorporated into the population projections, combining with elements of fertility, mortality and migration.

1.2.1 Population and Dwelling Unit Change for Study Area

Population and dwelling units are expected to grow consistently over the entire time frame. Population in the Study Area is projected to increase from 218895 in 2000 to 292596 in 2030, an increase of 33.7 percent. Dwelling units in the Study Area are projected to increase from 88999 in 2000 to 115386 in 2030, an increase of 29.7 percent. Population is expected to grow slightly faster than the number of dwelling units. In 2000, a significant number of dwelling units were unoccupied (7.5 percent). With the growth expected in the Study Area, some of those dwelling units are expected to be occupied by 2010. It is projected that a greater percent of dwelling units will be occupied in 2010 (94.4 percent versus 92.5 percent). Thus, population grows faster than the number of dwelling units for 2000-2010 (12.2 percent versus 9.9 percent) and for 2010-2020 (10.0 percent versus 8.6 percent). By 2020-2030, the growth rate of dwelling units and population is very similar, with dwelling units growing slightly faster (8.6 percent versus 8.29 percent (see Table 1.2.1-2). Graphs of population, dwelling unit and occupied dwelling units from 2000 to 2030 can be found in Appendix 1, Graphs 1 - 6.

Table 1.2.1-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population and Dwelling Unit Change for Study Area – 2000-2030

Year	Population	Dwelling Unit
2000	218895	88999
2010	245619	97829
2020	270203	106205
2030	292596	115386

Table 1.2.1-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Change in Population and Dwelling Unit Change for Study Area – 2000-2030

Year	Population (%)	Dwelling Unit (%)
2000-2010	12.21	9.92
2010-2020	10.01	8.56
2020-2030	8.29	8.64
2000-2030	33.67	29.65

The rate of population growth slowly decreases over time (for reasons, see Population and Dwelling Unit Methodology, Chapter 2.0). Dwelling unit growth decreases over the first two decades and then slowly increases in the last decade (see Table 1.2.1-5 and Table 1.2.1-6).

The Study Area is composed of all of Lafayette Parish and portions of four surrounding parishes. The tables below show growth in population (1.2.1-3 and 1.2.1-4) and dwelling units (2.1-5 and 2.1-6) by parish. The pattern for individual parishes is very similar to the overall pattern of growth for the Study Area. Growth is consistent in all decades.

Population growth decreases each decade, except in Acadia and Vermilion Parishes, where the rate goes up from 2000-10 to 2010-20, and then back down. Lafayette Parish, with its large densely built core in 2000, grows more slowly in both population and dwelling units than do the surrounding parishes. The Iberia Parish portion is projected to grow the most rapidly, 82.8 percent over the thirty year projection. Some of the fastest growing TAZs are found in the southern portion of the study area in Lafayette, St. Martin and Iberia parish (see Map 2-4).

Table 1.2.1-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change by Parish in Study Area – 2000-2030

Parish	2000	2010	2020	2030
Lafayette Parish	190503	212442	231826	249145
Acadia Parish	2127	2403	2747	3111
Iberia Parish	3410	4322	5282	6233
St. Martin Parish	20277	23544	27056	30447
Vermilion Parish	2578	2908	3292	3660
Total Study Area	**218895**	**245619**	**270203**	**292596**

Table 1.2.1-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Change in Population by Parish in Study Area – 2000-2030

Parish	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Lafayette Parish	11.52	9.12	7.47	30.78
Acadia Parish	12.98	14.32	13.25	46.26
Iberia Parish	26.74	22.21	18.00	82.79
St. Martin Parish	16.11	14.92	12.53	50.16
Vermilion Parish	12.80	13.20	11.18	41.97
Total Study Area	**12.21**	**10.01**	**8.29**	**33.67**

Table 1.2.1-5
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change by Parish in Study Area – 2000-2030

Parish	2000	2010	2020	2030
Lafayette Parish	78122	85419	92097	99577
Acadia Parish	809	876	966	1066
Iberia Parish	1203	1452	1737	2021
St. Martin Parish	7848	8912	10073	11215
Vermilion Parish	1017	1170	1332	1507
Total Study Area	**88999**	**97829**	**106205**	**115386**

Table 1.2.1-6
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Change in Dwelling Unit Change by Parish in Study Area – 2000-2030

Parish	2000-10	2010-20	2020-30	2000-30
Lafayette Parish	9.34	7.82	8.12	27.46
Acadia Parish	8.28	10.27	10.35	31.77
Iberia Parish	20.70	19.63	16.35	68.00
St. Martin Parish	13.56	13.03	11.34	42.90
Vermilion Parish	15.04	13.85	13.14	48.18
Total Study Area	**9.92**	**8.56**	**8.64**	**29.65**

1.2.2 Population and Dwelling Unit Change by Region

The Study Area has been divided into five large regions for purposes of analysis (see Section 1.3 for description of regions and Map 13-2). The tables summarize the amount and rate of both population change (Tables 1.2.2-1 and 1.2.2-2) and dwelling unit (Tables 2.2-3 and 2.2-4) change for each of the regions. It is clear that significant population and dwelling unit growth is seen in all four directions from Central Lafayette. Maps 2-1 to 2.4 show population change and Maps 3-1 to 3-4 show dwelling unit change by TAZ. Maps 2-4 and 3-4 summarize percent change from 2000 to 2030. The darker (and bluer) shades on the map, indicating the greatest increase, are seen in all directions from Central Lafayette, indicating the highest rates of growth being found in all four surrounding regions. Graphs of population, dwelling unit and occupied dwelling units from 2000 to 2030 by region can be found in Appendix 2, Graphs 10-16.

Table 1.2.2-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change by Region – 2000-2030

Region	2000	2010	2020	2030
Central Lafayette	74789	76383	76941	76540
North Region	40434	46052	51697	57407
East Region	14891	16949	19060	20945
South Region	52145	63437	73452	83209
West Region	36636	42798	49053	54495
Study Total Area	**218895**	**245619**	**270203**	**292596**

Table 1.2.2-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Change of Population Change by Region – 2000-2030

Region	2000-10	2010-20	2020-30	2000-30
Central Lafayette	2.13	.73	-.52	2.34
North Region	13.89	12.26	11.05	41.98
East Region	13.82	12.46	9.89	40.66
South Region	21.66	15.79	13.28	59.57
West Region	16.82	14.62	11.09	48.75
Study Area Total	**12.21**	**10.01**	**8.29**	**33.67**

Table 1.2.2-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change by Region – 2000-2030

Region	2000	2010	2020	2030
Central Lafayette	31991	32578	33104	33759
North Region	15597	17209	18925	20961
East Region	5743	6391	7085	7703
South Region	21081	25110	28514	32232
West Region	14587	16541	18577	20731
Study Area Total	**88999**	**97829**	**106205**	**115386**

Table 1.2.2-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Change of Population by Region – 2000-2030

Region	2000-10	2010-20	2020-30	2000-30
Central Lafayette	1.83	1.61	1.98	5.53
North Region	10.34	9.97	10.76	34.39
East Region	11.28	10.86	8.72	34.13
South Region	19.11	13.56	13.04	52.90
West Region	13.40	12.31	11.59	42.12
Study Area Total	**9.92**	**8.56**	**8.64**	**29.65**

Population in Central Lafayette is projected to grow by 2.3 percent from 2000 to 2030, increasing by nearly 2000 people. Dwelling units are expected to increase by 5.5 percent in Central Lafayette. This region is densely settled. Increases in dwelling units will be the result of filling in the few areas still available for growth. Dwelling unit growth will probably exceed population growth, as family size continues to slightly decrease in Central Lafayette.

Population in the four regions surrounding Central Lafayette is expected to increase between forty and sixty percent over the thirty year projection. In each region, the growth rate slows with each ensuing decade. The highest rates of growth are seen in the

South Region during each decade, with overall growth of 59.6 percent for the thirty years. The North Region grows 42.0 percent over the thirty years and has the most consistent growth, declining only slightly by decade. The East Region grows by 40.7 percent and the West Region by 48.8 percent over the thirty years. Change in the number of dwelling units mirrors the population change. Again, the South Region has the greatest increase in number of dwelling units (52.9 percent). The North Region again has the most consistent growth, with the increase in dwelling units actually highest in the final projection period of 2020-2030.

1.2.3 Population and Dwelling Unit Change by Subregion

While significant growth in population and dwelling units is expected in all the directions surrounding the Central Lafayette region, the amount and rate of growth differs dramatically within the various subregions. Map 13-1 illustrates the subregions, Maps 2-1 to 2-4 show population change by TAZ and Maps 3-1 to 3-4 show dwelling unit change by TAZ.

1.2.31 Central Lafayette Region

Population and dwelling units increase only modestly in Central Lafayette over the thirty year projection period. Those changes differ slightly within the four subregions of Central Lafayette. The four subregions of Central Lafayette and their corresponding TAZs are shown on Map 13-1. Change in population and dwelling units is summarized in Tables 2.31-1 to 2.31-4. Maps 2-1 to 2-4 summarize population change and Maps 3-1 to 3-4 summarize dwelling unit change.

Table 1.2.31-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change – Central Lafayette Region – 2000-2030

Sub-Area of Region	**2000**	**2010**	**2020**	**2030**
Central Business District	2917	2935	2914	3000
Lafayette East	16776	17025	17442	17974
Lafayette South	28088	28124	27681	26692
Lafayette North & West	27008	28299	28904	28874
Central Region Total	**74789**	**76383**	**76941**	**76540**

Table 1.2.31-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Population Change – Central Lafayette Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Central Business District	0.62	-0.72	2.95	2.85
Lafayette East	1.48	2.45	3.05	7.14
Lafayette South	0.13	-1.58	-3.57	-4.97
Lafayette North & West	4.78	2.14	-0.10	6.91
Central Region Total	**2.12**	**0.74**	**-0.52**	**2.34**

Table 1.2.31-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change - Central Lafayette Region – 2000-2030

Sub-Area of Region	DU2000	DU2010	DU2020	DU2030
CBD	892	886	857	927
Lafayette East	6916	6982	7183	7489
Lafayette South	12062	12325	12415	12515
Lafayette North & West	12121	12385	12649	12828
Central Region Total	31991	32578	33104	33759

Table 1.2.31-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Change of Dwelling Units - Central Lafayette Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20(%)	2020-30(%)	2000-30(%)
Central Business District	-0.67	-3.27	8.17	3.92
Lafayette East	0.95	2.88	4.26	8.29
Lafayette South	2.18	0.73	0.81	3.76
Lafayette North & West	2.18	2.13	1.42	5.83
Central Region Total	1.83	1.61	1.98	5.53

Central Business District. The Lafayette Central Business District area is expected to grow very slowly in population (2.9 percent) and dwelling units (3.9 percent) over the thirty year period. The projection assumes construction of Interstate 49 through this subregion from 2010 to 2020. Therefore, the number of dwelling units and population decreases during this decade as demolition of over 100 dwelling units is anticipated. From 2020 to 2030 the number of dwelling units increases substantially (8.2 percent), with a corresponding increase in population (3.0 percent). Depending on the nature and success of the redevelopment, an even greater population increase is possible.

Central Lafayette – East. The eastern portion of Central Lafayette is expected to increase in population, and to do so by increasing percentages each decade. This is an uncommon pattern within the Study Area. While growth in population is only modest

(1.5 percent 2000-10 to 3.1 percent 2020-30), it is reflective of the fact that this subregion is the one which does have significant areas of undeveloped land (for example TAZ 83 and TAZ 91). The development of the Louisiana Avenue interchange with Interstate10 should also spur residential growth. Dwelling unit growth is also the highest of the subregions over the projection period (8.3 percent) and like population, the growth rate increases each decade.

Central Lafayette – South. The area south of Central Lafayette is the only subregion in the entire Study Area which is projected to have a lower population in 2030 than in 2000. The population is expected to remain stable over the first ten years and then slowly decline during the final two decades. It is projected that this subregion will lose approximately 1400 residents (5.0 percent) over the thirty year projection. The subregion is projected to add a modest number of dwelling units. Family size should continue to slowly decrease. Many families with adults in their forties to sixties will have fewer children living at home and some will experience the death of a spouse. By 2030 many of the dwelling units are likely to begin to be occupied by a young family-forming population and the decline in population will likely be halted and perhaps reversed. This subregion contains the University of Louisiana at Lafayette and should be populated by an increasing number of students and singles. This subregion contains very little land for new residential development, and faces pressures to convert land into commercial usages. Demolition of single family dwellings to be replaced by multiple family dwellings is not anticipated in any large numbers – but if that were to occur the decline in population might be very negligible.

Central Lafayette – North and West. The area to the north and west of Central Lafayette is expected to slowly increase its number of dwelling units (5.8 percent) and its population (6.9 percent) by 2030. The rate of growth for both population and dwelling units is expected to decrease each decade as the amount of available land for development continues to diminish. By the 2020-30 projection, the population is expected to become relatively stable. While the age structure is similar to the area south of Central Lafayette, this subregion maintains a higher growth rate due to a significantly larger minority population and its generally higher fertility rates. The area between Cameron Street and Interstate 10 contains some of the faster growing TAZs in both dwelling units and population. This accessible area contains developable land and should continue to develop and fill in during the projection period. Notable growth is expected in TAZs 67, 68, 76, 191, 192, 196, 197 and 198, all located in the area between Cameron Street and Interstate 10 and illustrated on Maps 2-4 and 3-4.

1.2.32 North Region

The region north of Interstate10 is projected to increase its dwelling units by 34.4 percent and its population by 42.0 percent between the years 2000 and 2030. This is an addition of nearly 5400 dwelling units and 17,000 people over the projection period. This region contains areas of dense residential areas, older towns, expanding suburbs, and extensive rural area. The six subregions of the North region and their corresponding TAZs are

shown on Map 13-1. Change in population and dwelling units is summarized in Tables 1.2.32-1 to1.2.32-4. Maps 2-1 to 2-4 summarize population change and Maps 3-1 to 3-4 summarize dwelling unit change.

Table 1.2.32-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change – North Region – 2000-2030

Sub-Area of Region	**2000**	**2010**	**2020**	**2030**
North Central	6969	8251	9369	10529
Carencro	9363	10796	12251	13921
NE	14246	15616	16933	18048
NW	4837	5491	6213	6954
Acadia Parish	2127	2403	2747	3111
St. Martin Parish North	2892	3495	4184	4844
North Region Total	**40434**	**46052**	**51697**	**57407**

Table 1.2.32-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Population Change – North Region – 2000-2030

Sub-Area of Region	**2000-10 (%)**	**2010-20 (%)**	**2020-30 (%)**	**2000-30 (%)**
North Central	18.40	13.55	12.38	51.08
Carencro	15.30	13.48	13.63	48.68
NE	9.62	8.43	6.58	26.69
NW	13.52	13.15	11.93	43.77
Acadia Parish	12.98	14.32	13.25	46.26
St. Martin Parish North	20.85	19.71	15.77	67.50
North Region Total	**13.89**	**12.26**	**11.04**	**41.97**

Table 1.2.32-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change – North Region – 2000-2030

Sub-Area of Region	2000	2010	2020	2030
North Central	2781	3107	3424	3770
Carencro	3433	3840	4255	4805
NE	5655	6073	6510	7023
NW	1784	1961	2172	2435
Acadia Parish	809	876	966	1066
St. Martin Parish North	1135	1352	1598	1862
North Region Total	**15597**	**17209**	**18925**	**20961**

Table 1.2.32-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Dwelling Unit Change – North Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
North Central	11.72	10.20	10.11	35.56
Carencro	11.86	10.81	12.93	39.97
NE	7.39	7.20	7.88	24.19
NW	9.92	10.76	12.11	36.49
Acadia Parish	8.28	10.27	10.35	31.77
St. Martin Parish North	19.12	18.20	16.52	64.05
North Region Total	**10.34**	**9.97**	**10.76**	**34.39**

North Central Lafayette Parish. This subregion is bounded by Interstate 10 to the south, Interstate 49 to the east , Gloria Switch Road to the north, and Mills Street to the west. While significant portions of the subregion are already developed, extensive land still remains available. The close proximity to the City of Lafayette and to the two interstates should attract growth. This subregion should be one of the fastest growing parts of this region, second only to the St. Martin Parish subregion. Dwelling units are expected to increase by 35.6 percent and population by 51.1 percent over the thirty years. The more rapid growth of population as compared to dwelling units reflects the greater occupancy rates and the larger household sizes associated with extensive family formation. The rate of growth of both population and dwelling units is expected to slowly decrease each decade. Four of the TAZs are expected to increase in population by more than one hundred percent and are each found in a different part of this subregion.

Carencro Area. This subregion contains the already densely settled City of Carencro, which is likely to experience only modest growth. The areas around the city core, however, can expect significant growth. Dwelling units in this subregion are expected to increase by 40.0 percent and population by 48.7 percent over the thirty year projection period. Unlike several other parts of this region, the Carencro area is expected to increase its growth rate in 2020-30 as compared with 2010-20. As the areas more adjacent to Lafayette become developed, growth should then expand to the areas north and west and Carencro. Examples include TAZs 377, 380 and 381. These are the three TAZs within the subregion projected to increase by more than one hundred percent over the thirty year projection period, and their population increase is greater for 2020-30 than for 2010-20.

Northeast Lafayette Parish. This subregion is bounded by Interstate 49 to the west and Interstate 10 to the south. The southern portion of this subregion is already extensively developed. The northern and eastern portions still have significant land available for future residential development. Dwelling units are expected to increase by 24.2 percent and population by 26.7 percent over the projection period. This makes this northeast area the slowest growing subregion in the North. The rate of growth of dwelling units remains

fairly constant (between seven and eight percent per decade), while the population growth rate slowly declines. The area should have approximately 1400 more dwelling units and nearly 4,000 more people in 2030 than in 2000. TAZs 411 and 415 are expected to increase their population by more than one hundred percent over the thirty year projection period. TAZ 411 is located in the far northeast and TAZ 415 adjacent to Interstate 10 and the new Louisiana Avenue interchange.

Northwest Lafayette Parish. This subregion borders Scott to the south and is not densely populated. Growth in dwelling units is expected to increase with each ensuing decade as residential dwellings continue to move outward into this subregion. Dwelling units are projected to increase by 36.5 percent, increasing from 9.9 percent in 2000-10 to 12.1 percent in 2020-30. Population is expected to increase by 43.8 percent over the thirty year projection. While no TAZ is expected to increase their population by more than one hundred percent over the thirty year projection period, four TAZs can expected to increase by more than fifty percent.

St. Martin Parish North. This subregion is expected to be the most rapidly growing part of the North Region. Dwelling units are projected to increase by 64.1 percent and population by 67.5 percent over the thirty year projection period. The greatest increases occur in 2000-10, decreasing slightly over the next two decades. Significant recent development (2000-03) has occurred in this subregion, but large areas should still remain undeveloped even by 2030. Three of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period, and eight out of the eleven TAZs by more than fifty percent.

Acadia Parish. The portion of the Study Area in Acadia Parish is expected to have its dwelling units increase by 31.8 percent and its population by 46.3 percent over the thirty year projection. New residential development has recently moved into a number of TAZs and modest growth should continue. Five of the TAZs are expected to increase their population by more than fifty percent over the thirty year projection period.

1.2.33 West Region

The region west of Ambassador Caffery and south of Interstate10 is projected to increase its dwelling units by 42.1 percent and its population by 48.8 percent between the years 2000 and 2030. This is an addition of over 6,000 dwelling units and nearly 18,000 people over the projection period. This region contains the municipalities of Scott and Duson, residential areas expanding westward from Lafayette and extensive agricultural regions. The six subregions of the West region and their corresponding TAZs are shown on Map 13-1. Change in population and dwelling units is summarized in Tables 1.2.33-1 to 1.2.33-4. Maps 2.1 to 2.4 summarize population change and Maps 3-1 to 3-4 summarize dwelling unit change.

Table 1.2.33-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change – West Region – 2000-2030

Sub-Area of Region	2000	2010	2020	2030
Duson South	3009	3317	3677	3964
Far West	2558	2950	3383	3819
Johnston to River	7116	8779	10997	12832
Scott	13218	14615	15660	16338
Congress to Johnston	8157	10229	12044	13882
Vermilion Parish	2578	2908	3292	3660
West Region Total	**36636**	**42798**	**49053**	**54495**

Table 1.2.33-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Population Change – West Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Duson South	10.24	10.85	7.81	31.74
Far West	15.32	14.68	12.89	49.30
Johnston to River	23.37	25.26	16.69	80.33
Scott	10.57	7.15	4.33	23.60
Congress to Johnston	25.40	17.74	15.26	70.19
Vermilion Parish	12.80	13.20	11.18	41.97
West Region Total	**16.81**	**14.62**	**11.11**	**48.76**

Table 1.2.33-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change – West Region – 2000-2030

Sub-Area of Region	2000	2010	2020	2030
Duson South	1199	1317	1472	1626
Far West	939	1065	1203	1372
Johnston to River	2542	2992	3555	4088
Scott	5566	5974	6398	6833
Congress to Johnston	3324	4023	4617	5305
Vermilion Parish	1017	1170	1332	1507
West Region Total	**14587**	**16541**	**18577**	**20731**

Table 1.2.33-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Dwelling Unit Change – West Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Duson South	9.84	11.77	10.46	35.61
Far West	13.42	12.96	14.05	46.11
Johnston to River	17.70	18.82	14.99	60.82
Scott	7.33	7.10	6.80	22.76
Congress to Johnston	21.03	14.77	14.90	59.60
Vermilion Parish	15.04	13.85	13.14	48.18
West Region Total	**13.40**	**12.31**	**11.59**	**42.12**

Duson South. This subregion is bounded by Acadia Parish and Interstate 10 to the north. The subregion is west of South Fieldspan Road and extends southward to West Congress Street. The Town +of Duson is in the northern portion of this subregion, and residential growth is expected in adjacent TAZs. Much of the remainder of the subregion is agricultural and growth is expected to only be modest. Large portions of this subregion should still be agricultural in 2030. This area has the second slowest growth of the subregions in West. Dwelling units are expected to increase by 35.6 percent and population by 31.7 percent over the thirty year projection period. Growth is expected to be the greatest during the 2010 to 2020 decade. Three of the TAZs are expected to increase their population between fifty and one hundred percent over the thirty year projection period, while the majority of the TAZs are expected to see increases between fifteen and thirty percent.

Far West Lafayette Parish. This subregion includes the southwestward portion of Lafayette Parish, bounded by West Congress Street on the north and South Fieldspan Road on the east. This subregion has a very small, disbursed population, projected to increase from 2558 to 3819. Dwelling units are expected to increase by 46.1 percent and population by 49.3 percent over the thirty year projection period. Dwelling unit growth is expected to by the greatest in the 2020-30 decade as growth begins to move this far outward from the Lafayette core. The majority of the land is still likely to be agricultural in 2030. Two of the TAZs are expected to increase their population by more than ninety percent over the thirty year projection period.

Johnston Street to Vermilion River – West. This subregion includes the area between Johnston Street and the Vermilion River, stretching from Ambassador Caffery Parkway to the Vermilion Parish border. With the Vermilion River as an amenity and Johnston Street for accessibility, this area is expected to be the most rapidly growing subregion in the West. Dwelling units are expected to increase by 60.8 percent and population by 80.3 percent over the thirty year projection period. Dwelling units are expected to increase the most from 2010 to 2020 as several large pieces of vacant land become subdivided into both single and multifamily dwellings. Three of the nine TAZs (296, 299

and 302) are expected to increase their population by more than one hundred percent over the thirty year projection period.

Scott Area. The Scott region is bounded by Interstate 10 to the north, West Congress Street to the south and South Fieldspan Road to the west. This subregion contains the long established City of Scott and some developed suburban areas of the City of Lafayette. There are still some areas for new residential development, but growth here is projected to be the slowest of all the subregions in the West. Dwellings units are expected to increase by 22.8 percent and population by 23.6 percent over the thirty year projection period. Dwelling unit growth is expected to be relatively constant each decade, with population growth declining over time as families age and become smaller. The most rapidly growing TAZs are concentrated to the south and west of Scott and include TAZs 329, 330 and 333. These three TAZs are expected to increase their population between ninety and one hundred eighty percent over the thirty year projection period.

Congress Street to Johnston Street – West. This subregion extends from West Congress Street southward to Johnston Street and westward to South Fieldspan Road. The eastern portion of this subregion is fairly developed, but as one moves westward significant land is available. The most rapid growth is expected during 2000-2010, partly due to an already completed large apartment complex built during 2000-03 (TAZ 316). Dwelling units are expected to increase by 59.6 percent and population by 70.2 percent over the thirty year projection period, making this the second fasting growing subregion in the West. Three of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period, with a majority of the TAZs increasing by more than fifty percent.

Vermilion Parish. This portion of Vermilion Parish includes the Village of Maurice. Growth is projected to be moderate each decade, with the fastest growth occurring in TAZ 907 along the Vermilion River. Dwelling units are expected to increase by 48.2 percent and population by 42.0 percent over the thirty year projection period. Two of the TAZs (907 and 908) are expected to increase their population by more than one hundred percent over the thirty year projection period.

1.2.34 South Region

The region south of the Vermilion River is the most rapidly growth part of the Study Area. The region is projected to increase its number of dwelling units by 52.9 percent and its population by 59.6 percent between the years 2000 and 2030. This is an addition of over 11,000 dwelling units and over 31,000 people over the projection period. The nine subregions of the South region and their corresponding TAZs are shown on Map 13-1. Change in population and dwelling units is summarized in Tables 1.2.34-1 to 1.2.34-4. Maps 2-1 to 2-4 summarize population change and Maps 3-1 to 3-4 summarize dwelling unit change.

Table 1.2.34-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change – South Region – 2000-2030

Sub-Area of Region	2000	2010	2020	2030
Broussard	6412	7311	8400	9630
Airport South	1263	1324	1355	1370
Far South	1892	2185	2766	3519
South of K. Saloom	16662	19824	21343	22295
Milton	5141	6073	7389	8904
Verm. River to K. Saloom	4974	5948	6438	6626
Youngsville Area	9897	13350	16667	19974
St. Martin South	2494	3100	3812	4658
Iberia Parish	3410	4322	5282	6233
South Region Total	**52145**	**63437**	**73452**	**83209**

Table 1.2.34-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Population Change – South Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Broussard	14.02	14.90	14.64	50.19
Airport South	4.83	2.34	1.11	8.47
Far South	15.49	26.59	27.22	85.99
South of K. Saloom	18.98	7.66	4.46	33.81
Milton	18.13	21.67	20.50	73.20
Verm. River to K. Saloom	19.58	8.24	2.92	33.21
Youngsville Area	34.89	24.85	19.84	101.82
St. Martin South	24.30	22.97	22.19	86.77
Iberia Parish	26.74	22.21	18.00	82.79
South Region Total	**21.66**	**15.78**	**13.29**	**59.58**

Table 1.2.34-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change – South Region – 2000-2030

Sub-Area of Region	2000	2010	2020	2030
Broussard	2540	2797	3150	3602
Airport South	563	600	653	705
Far South	682	757	938	1186
South of K Saloom	7374	8534	9079	9605

Table 1.2.34-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change – South Region – 2000-2030

Sub-Area of Region	2000	2010	2020	2030
Milton	1840	2123	2501	3011
Verm R to K Saloom	2162	2732	2973	3197
Youngsville Area	3747	4946	6093	7255
St. Martin South	970	1169	1390	1650
Iberia Parish	1203	1452	1737	2021
South Region Total	**21081**	**25110**	**28514**	**32232**

Table 1.2.34-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Dwelling Unit Change – South Region – 2000-2030

Sub-Area of Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Broussard	10.12	12.62	14.35	41.81
Airport South	6.57	8.83	7.96	25.22
Far South	11.00	23.91	26.44	73.90
South of K. Saloom	15.73	6.39	5.79	30.25
Milton	15.38	17.80	20.39	63.64
Verm. River to K. Saloom	26.36	8.82	7.53	47.87
Youngsville Area	32.00	23.19	19.07	93.62
St. Martin South	20.52	18.91	18.71	70.10
Iberia Parish	20.70	19.63	16.35	68.00
South Region Total	**19.11**	**13.56**	**13.04**	**52.90**

Broussard Area. The Broussard subregion contains a densely populated city and surrounding TAZs with significant room for residential growth. The Broussard area is expected to grow at a moderate rate, and that rate is expected to continue and even accelerate slightly over the length of the projection. The upgrading of US Hwy 90 to become Interstate 49 should further enhance long range growth. Population is expected to grow between fourteen and fifteen percent every decade, 50.2 percent for the thirty years. The growth in dwelling units is projected to increase each decade, reaching 14.4 percent by 2020-30, this resulting in a 41.8 percent increase for the thirty years. Five of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period.

Airport South Along US Hwy 90. This subregion extends along both sides of US Hwy 90 from the Lafayette Regional Airport down toward Broussard. It is bordered by West Pinhook Road, South Bernard Road and St. Martin Parish. The area is dominated by commercial, industrial and warehousing activities. Some land is available for residential development, but extensive growth is not expected. The area is expected to have the slowest growth of all the subregions in the South, with its population projected to

increase only 8.5 percent over the thirty year period. Where percentage increases are relatively high (TAZ 129 and TAZ 139), the number of actual new dwelling units and people is very modest.

Far South Lafayette Parish. This subregion is south of Youngsville and extends eastward to Iberia Parish. This area is primarily agricultural, but contains several large land holdings making it a prime location for larger subdivision development in the future. Dwelling units are expected to increase by 73.9 percent and population by 86.0 percent over the thirty year projection period. This sparsely occupied subregion is projected to increase from a population of only 1,892 in 2000 to 3,519 in 2030. Growth rates are expected to increase each decade, with the largest population growth occurring between 2020 and 2030 as development begins to reach this dominantly agricultural subregion. Three of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period. Two of these TAZs (266 and 267) are located immediately to the south of Youngsville and rapidly growth TAZ 265.

South of Kaliste Saloom Road to La Neuville Road. This subregion is bordered by Kaliste Saloom Road to the north and La Neuville Road and Vincent Road to the south. It stretches from West Pinhook Road to East Broussard Road. This subregion is growing rapidly, being adjacent and accessible to the City of Lafayette. That growth will slow down dramatically, however, as available land for new residences soon becomes very limited. Population is expected to increase by 19.0 percent during 2000-10, by 7.7 percent during 2010-20 and by only 4.5 percent during 2020-30. Dwelling units are expected to increase by 30.3 percent and population by 33.8 percent over the thirty year projection period. TAZs 287 and 288 to the west are the two TAZs expected to increase their population by more than one hundred percent over the thirty year projection period.

Milton Area. The Milton subregion is bounded by the Vermilion Parish boundary, Verot School Road to the east and East Broussard Road and Vincent Road to the north. Growth is centered in the area north of Milton as one approaches the Vermilion River. Land is available for significant additional growth to occur. Dwelling units are expected to increase by 63.6 percent and population by 73.2 percent over the thirty year projection period. The rate of growth tends to increase by decade, with the greatest increases occurring toward the end of the projection. Three of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period, with TAZ 294 expected to increase by more than two hundred percent.

Vermilion River to Kaliste Saloom Road. This subregion extends between the Vermilion River and Kaliste Saloom Road from Pinhook Road on the east to East Broussard Road on the west. The eastern portions of the subregion are becoming heavily populated, while TAZs 289 and 290 to the west remain sparsely populated and available for future expansion. This subregion is projected to grow dramatically between 2000 and 2010, increasing its dwelling units by 26.4 percent and its population by 19.6 percent. The majority of that growth has already taken place (2000-03). The construction of the Camellia Boulevard Bridge across the Vermilion River resulted in new land becoming

available for residential use between the Vermilion River and Kaliste Saloom Road. The new residential dwellings are a combination of single and multifamily units, increasing the dwelling units and population found in TAZs 154 and 155 most dramatically. Growth for the following two decades slows substantially as limited space remains, and pressure for commercial usage outward from Kaliste Saloom Road continues. The subregion's population is projected to grow by 8.2 percent between 2010 and 2020, and by 2.9 percent between 2020 and 2030. The overall population growth rate for the thirty year projection period is 33.2 percent.

Youngsville Area. This subregion includes the Town of Youngsville and extends eastward to the St. Martin Parish border, thus including much of Le Triomphe, a gated golf community. This subregion is projected to be the most rapidly growing part of the South Region and the most rapidly growing subregion in the entire Study Area, more than doubling in population between 2000 and 2030. The area north of Youngsville is a major growth core in Lafayette Parish. Significant growth has already occurred here between 2000 and 2003 and is projected to continue. Growth in population should become slower each decade as residential area fills in the landscape, but should still be near twenty percent even in the final decade of the projection. The absolute numbers are significant, as the subregion increases from 3,747 dwelling units in 2000 to a projected 7,255 in 2030, and from a population of under 10,000 in 2000 to nearly 20,000 by 2030. Dwelling units are expected to increase by 93.6 percent and population by 101.8 percent over the thirty year projection period. The completion of Ambassador Caffery Parkway South through this subregion, Interstate 49 on its eastern border, and the availability of large developable land holdings all encourage growth. Nine of the twenty-one TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period, and three TAZs by more than two hundred percent. TAZ 265 to the north and west of Youngsville is projected the have the greatest increase in the subregion, increasing its population and dwelling units by approximately four hundred percent, from 166 dwelling units and 437 people in 2000 to 802 dwelling units and 2262 people in 2030. TAZs 282 and 283 immediately north of TAZ 265 are also expected to dramatically increase. TAZ 242 on the east, bordering the new Interstate 49 is also projected to increase its population significantly.

St. Martin Parish South. The southwestern portion of St. Martin Parish which is in the Study Area extends south from Aubry Ozenne Road. The western portion of this subregion includes the Le Triomphe development and the Interstate 49 upgrade. This area already has significant commercial and industrial activities. The eastern portion of the subregion is more agricultural, with land available for future residential development. Significant growth is expected, making this subregion the most rapidly growing one in St. Martin Parish. Dwelling units are expected to increase by 70.1 percent and population by 86.8 percent over the thirty year projection period. Five of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period.

Iberia Parish. The portion of Iberia Parish in the study area includes the Coteau area and is found on both sides of US Hwy 90. Growth is projected to be very high. With US Hwy 90 being upgraded to become Interstate 49, accessibility will increase. The area is already attracting commercial and residential activities. Dwelling units are expected to increase by 68.0 percent and population by 82.8 percent over the thirty year projection period. Growth rates should decrease each decade, but still remain significant even in 2020-30. Five of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period.

1.2.35 East Region

This portion of St. Martin Parish is south of Interstate 10 and north of Aubry Ozenne Road. The region is projected to increase its number of dwelling units by 34.1 percent and its population by 40.7 percent between the years 2000 and 2030. This is an addition of nearly 2,000 dwelling units and over 6,000 people over the projection period. The three subregions of the East region and their corresponding TAZs are shown on Map 13-1. Change in population and dwelling units is summarized in Tables 1.2.35-1 to 1.2.35-4. Maps 2-1 to 2-4 summarize population change and Maps 3-1 to 3-4 summarize dwelling unit change.

Table 1.2.35-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population Change – East Region – 2000-2030

Sub-Area of Region	**2000**	**2010**	**2020**	**2030**
Breaux Bridge	7066	7906	8704	9398
St. Martin East	4542	5350	6213	7033
St. Martin West	3283	3693	4143	4514
East Region Total	**14891**	**16949**	**19060**	**20945**

Table 1.2.35-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Population Change – East Region – 2000-2030

Sub-Area of Region	**2000-10 (%)**	**2010-20 (%)**	**2020-30 (%)**	**2000-30 (%)**
Breaux Bridge	11.89	10.09	7.97	33.00
St. Martin East	17.79	16.13	13.20	54.84
St. Martin West	12.49	12.19	8.95	37.50
East Region Total	**13.81**	**12.46**	**9.89**	**40.66**

Table 1.2.35-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Change – East Region – 2000-2030

Sub-Area of Region	**2000**	**2010**	**2020**	**2030**
Breaux Bridge	2645	2874	3096	3233
St. Martin East	1760	2043	2373	2706
St. Martin West	1338	1474	1616	1764
East Region Total	**5743**	**6391**	**7085**	**7703**

Table 1.2.35-4
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Dwelling Unit Change – East Region – 2000-2030

Region	**2000-10 (%)**	**2010-20 (%)**	**2020-30 (%)**	**2000-30 (%)**
Breaux Bridge	8.66	7.72	4.43	22.23
St. Martin East	16.08	16.15	14.03	53.75
St. Martin West	10.16	9.63	9.16	31.84
East Region Total	11.28	10.86	8.72	34.13

Breaux Bridge Area. This subregion includes the densely settled area found within the City of Breaux Bridge, with some of the TAZs extending outward into areas of agricultural land. Moderate growth is projected for this subregion, becoming slower each decade. Dwelling units are expected to increase by 22.2 percent and population by 33.0 percent over the thirty year projection period. A significant minority population and its associated higher fertility rates help sustain the greater population growth. Three of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period. These rapidly growing TAZs (615, 621 and 649) all border central Breaux Bridge.

St. Martin Parish East - Henderson. This subregion includes the portion of St. Martin Parish in the Study Area which is between of Interstate 10 and Bayou Teche. The subregion is east of Breaux Bridge and includes the Town of Henderson. The development of frontage roads along Interstate 10 should make residential land in this subregion more accessible. The southern portion of the subregion has seen recent growth, with significant land available for an expanding Breaux Bridge. Dwelling units are expected to increase by 53.8 percent and population by 54.8 percent over the thirty year projection period. Three of the TAZs are expected to increase their population by more than one hundred percent over the thirty year projection period, led by TAZ 613 which borders Interstate 10 and connects Breaux Bridge and Henderson.

Western St. Martin Parish. This subregion is west of Breaux Bridge to the Lafayette Parish border. It is south of Interstate 10, extending to Aubry Ozenne Road to the south and east to Breaux Bridge in the north and Bayou Teche further south. Commercial and

industrial activities exist along Mills Highway (Breaux Bridge Highway) connecting Breaux Bridge and Lafayette. Much of the southern portion of this subregion consists of lakes, wetlands and environmental sensitive areas. Development here is expected to be very limited, most likely on the outer portions and near major transportation routes. Population and dwelling unit growth is not projected to increase over time. Overall growth is expected to be moderate with dwelling units expected to increase by 31.8 percent and population by 37.5 percent over the thirty year projection period. Only TAZ 661 is expected to increase its population by more than one hundred percent over the thirty year projection period, increasing from 52 to 122, from 27 dwelling units to 60. The percentage increase in TAZ 661 is significant, but the absolute number increase is very modest for a TAZ this large in area.

1.2.4 Population and Dwelling Unit Change – Transportation Variable

Most long range transportation improvements are not included in this analysis, as part of the reason for this study is to determine appropriate transportation priorities. Several transportation projects are, however, considered relevant. Map 14-1 documents those TAZs which are expected to be impacted. Both the opening of the Louisiana Avenue interchange at Interstate 10, and the widening of Rees Street in Breaux Bridge were completed between 2000 and 2003. Frontage roads are expected to be constructed along Interstate 10 in St. Martin Parish between 2010 and 2020. Ambassador Caffery Parkway South from Verot School Road to the US Hwy 90 (Interstate 49) should be completed by 2010, with its impacts felt into the next decade.

Perhaps the most significant transportation improvement is the upgrading of US Hwy 90 to become Interstate 49. The building of Interstate 49 from Interstate 10 to the southern edge of the Study Area is expected to be completed by 2020, with impacts lasting into the next decade. Construction is expected to dramatically impact several central city TAZs. The loss of 105 dwelling units is projected between 2010 and 2020. Between 2020 and 2030, 115 dwelling units are added, representing expected new redevelopment in this region. Significant impact is seen in the TAZs south of Lafayette, as the presence of Interstate 49 is expected to improve accessibility in neighboring TAZs. The impact is clearly seen in Map 14-1 for both the decade ending in 2020 and the decade ending in 2030. In interpreting the map, it will appear that several TAZs along the transportation improvement have been omitted. Several of these TAZs are predominantly commercial and industrial and lack residential development. Therefore, no residential impact is seen in these non-residential TAZs. In other TAZs, the residential population is small and the impact negligible.

1.2.5 Population and Dwelling Unit Change – Proximity Variable

Growth is deemed more likely when a TAZ is in close proximity to other rapidly growing TAZs. Core areas containing the most rapid growth during 2000-10 are noted, to identify nine core areas for the 2010-20 decade. Core areas with rapid growth during the 2010-20

decade are then used to project areas impacted during 2020-30. Maps 10-1 and 10-2 illustrate affected TAZs for the respective decades.

The core growth areas for both decades are found in all four of the regions surrounding Central Lafayette. Several TAZs within Central Lafayette are modestly affected by the proximity variable, but most of the impact is seen in adjacent regions.

In the North Region, TAZs benefiting from proximity are found in all six subregions. A major core is found to the west of Carencro, centering on TAZ 375. Secondary cores are found east of Interstate 49, in Acadia Parish and in St. Martin Parish - North.

In the West Region, a major core area is found in the eastern part, on both sides of West Congress Street (TAZs 321, 322, 326, 327). Another major core area centers on Johnston Street, with the highest impacts between Johnston Street and the Vermilion River (TAZs 299 and 302). This impact continues southward along the Vermilion River to impact TAZs adjacent to the River in Vermilion Parish.

In the East Region, a core area exists in Breaux Bridge and to the east, centering on TAZs 613 and 615. A secondary core is found in the area to the south of Breaux Bridge.

The South Region contains numerous major growth cores. Major growth cores are found on both sides of Kaliste Saloom Road (such as TAZs 153, 155, 285 and 289) and north of Youngsville. These cores extend outward, meshing with secondary cores north of Milton, along the Vermilion River, and eastward to Broussard and St. Martin Parish. By 2030 the influence extends even further southward, past Youngsville toward the Vermilion Parish border. The Coteau area of Iberia Parish forms another secondary core.

1.2.6 Population and Dwelling Unit Change – Multifamily Units

While exact locations of new multifamily dwellings are difficult to predict, general areas comprised of several TAZs are selected as most likely candidates. The dwelling unit and population growth associated with the multifamily dwellings are then divided amongst those geographically adjacent TAZs. Map 16-1 illustrates the TAZs most likely affected by additional multifamily dwelling construction from 2010 to 2030. It should be noted that based on past growth, the building of some multifamily dwellings is already assumed in many additional TAZs.

Additional large apartment complexes are likely to follow current patterns and locate adjacent to major transportation arteries. Map 16-1 shows multifamily dwellings locating further westward along Johnston Street, filling in along Kaliste Saloom Road, and developing along the new Ambassador Caffery Parkway South. Additional TAZs impacted include some along Rees Street in Breaux Bridge, Congress Street west, the new Louisiana Avenue interchange and approach to Interstate 10, and the core growth area just north of Youngsville.

1.2.7 Population and Dwelling Unit Change – Land Availability

The percent of land available for residential development in each TAZ directly impacts the likelihood of new dwelling units and their related population growth. Maps 8-1, 8-2, 8-3 and 8.4 estimate the approximate percent of land still available for residential use by decade. A review of each map shows the area of densely developed land in shades of red and orange. The blue shades indicate sparse populations. The central core of Lafayette is clearly seen, as well as the municipalities of Breaux Bridge, Broussard, Carencro, Scott and Duson. By 2020, the areas south of the Vermilion River to Youngsville have increased their densities and have clearly reduced amounts of land available for development. By the end of the projection period, vast areas on the periphery of the Study Area still remain very sparsely populated, dominantly agricultural and with over eighty percent of their land still available. Several anomalies appear on the maps, isolated TAZs which have little or no land available for residential use because they are dominated by transportation, commercial or other land uses (for example, TAZ 240 - transportation and commercial uses).

Several large pieces of property (often under single ownership) have been identified as likely candidates for extensive subdivision creation. Map 15-1 illustrates the presence of several large land holdings which should encourage residential development.

1.2.8 Occupied and Vacant Dwelling Units

With a significant increase in dwelling unit growth as compared with past decades, it is assumed that the vacancy rate will decline by approximately one-fourth from 2000 to 2010. Thus the occupancy rate is expected to increase from 92.5 percent in 2000 to approximately 94.5 percent in 2010 and remain at that level for subsequent projections. A graph occupied dwelling unit from 2000 to 2030 can be found in Appendix 1 and graphs by region can be found in Appendix 2.

Table 1.2.8-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Occupied and Vacant Dwelling Units – 2000-2030

Dwelling Units	**2000**	**2010**	**2020**	**2030**
Occupied	82351	92386	100345	109124
Vacant	6648	5443	5860	6262
Total	88999	97829	106205	115386
Percent Vacant (%)	**7.5**	**5.6**	**5.5**	**5.4**

1.2.9 TAZs with Greatest Increase in Population

An increase in population can be measured by both percent increase and absolute numbers. Maps 2-1, 2-2 and 2-3 show absolute population change over the three decades of the projection. The larger, more populous TAZs are, of course, emphasized, but the

maps do indicate where the greater growth in dwelling units can be expected. Map 2-4 shows percent increase from 2000 to 2030. It is clear that the TAZs with the greatest increase in population are found in all four directions from Central Lafayette. TAZs increasing over seventy percent from 2000 to 2030, and with an absolute increase of at least one hundred people are included in Table 1.2.9. These rapidly growing TAZs are found in all five regions and in twenty-six out of the twenty-eight subregions. Three of these rapidly growing TAZs are found in Central Lafayette, twenty-three in the North Region, twenty-four in the West Region, forty-four in the South Region and seven in the East Region.

Table 1.2.9
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Rapid Population Growth
Classified by Region and Sub-Area -- by Percent and Absolute Change - 2000-2030

	Percent Change	Count
Central Lafayette:		
Central Business District	0%	0
Lafayette East 91	72%	779
Lafayette South 177	197%	380
Lafayette North & West 67	137%	925
North Region:		
North Central Lafayette Parish		
202	224%	110
354	79%	293
357	84%	344
359	96%	136
364	205%	438
396	107%	443
Carencro Area.		
372	84%	515
375	71%	516
377	101%	999
380	127%	565
381	147%	378
Northeast Lafayette Parish.		
384	78%	271
407	79%	253
411	143%	158
415	112%	395
Northwest Lafayette Parish.		
366	90%	481
St. Martin Parish North.		
604	74%	113
605	86%	238

Table 1.2.9
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Rapid Population Growth
Classified by Region and Sub-Area -- by Percent and Absolute Change - 2000-2030

606	84%	343
608	154%	209
702	139%	162
Acadia Parish		
804	85%	446
806	96%	117
West Region:		
Scott Area		
329	177%	106
330	94%	242
333	97%	421
337	76%	346
Duson Southward		
423	92%	524
Congress St to Johnston St West		
305	150%	179
306	71%	334
307	82%	465
308	98%	251
311	88%	220
312	88%	168
313	128%	887
314	98%	260
316	71%	545
321	258%	873
Johnston St to Vermilion R. West		
296	154%	352
299	125%	1487
300	82%	1143
301	81%	527
302	125%	1274
Far West Lafayette Parish		
428	96%	146
429	72%	275
434	104%	150
Vermilion Parish		
907	131%	244
South Region:		
Airport South Along US Hwy 90	0%	0
Broussard Area		
221	164%	479

Table 1.2.9
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Rapid Population Growth
Classified by Region and Sub-Area -- by Percent and Absolute Change - 2000-2030

229	118%	686
236	107%	141
238	89%	112
241	199%	597
Vermilion R. to Kaliste Saloom Rd		
154	71%	490
155	178%	963
290	278%	139
S. of K. Saloom Rd to La Neuville R		
151	77%	253
275	83%	180
277	81%	971
287	213%	264
288	327%	287
Youngsville Area		
234	73%	252
244	173%	445
248	86%	867
249	118%	765
265	418%	1825
271	101%	236
278	70%	610
279	99%	553
280	106%	107
281	120%	668
282	180%	1328
283	200%	861
Far South Lafayette Parish		
254	80%	301
266	199%	381
267	375%	398
Milton Area		
264	113%	845
284	71%	1097
291	144%	657
294	209%	317
South St. Martin Parish		
685	154%	229
686	83%	105
687	100%	346
694	160%	350

Table 1.2.9 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **TAZs with Rapid Population Growth** **Classified by Region and Sub-Area -- by Percent and Absolute Change - 2000-2030**		
695	84%	194
696	230%	232
Iberia Parish		
850	119%	317
852	165%	161
854	72%	106
857	114%	446
860	275%	662
861	75%	101
East Region:		
Breaux Bridge Area		
615	130%	1273
620	84%	220
621	110%	132
Henderson and St. Martin Parish East		
613	377%	558
657	123%	199
665	104%	196
Western St. Martin Parish		
674	95%	374

1.2.10 TAZs with Greatest Increase in Dwelling Units

An increase in dwelling units can be measured by both percent increase and absolute numbers. Maps 3-1, 3-2 and 3-3 show absolute dwelling unit change over the three decades of the projection. The larger, more populous TAZs are, of course, emphasized, but the maps do indicate where the greater growth in dwelling units can be expected. Map 3-4 shows percent increase from 2000 to 2030. It is clear that the TAZs with the greatest increase in dwelling units are found in all four directions from Central Lafayette. TAZs increasing over sixty percent from 2000 to 2030, and with an absolute increase of at least fifty dwelling units are included in Table 1.2.10. These rapidly growing TAZs are found in all five regions and in twenty-five out of the twenty-eight subregions. Three of these rapidly growing TAZs are found in Central Lafayette, seventeen in the North Region, nineteen in the West Region, thirty-seven in the South Region and five in the East Region

Table 1.2.10
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Rapid Dwelling Unit Growth –
Classified by Region and Sub-Area -- Percent and Absolute Change – 2000-2030

Central Lafayette:		
Central Business District	0%	0
Lafayette East		
91	61%	275
Lafayette South		
177	208%	164
Lafayette North & West		
67	97%	179
North Region:		
North Central Lafayette Parish		
206	204%	55
364	190%	150
Carencro Area.		
372	65%	141
375	64%	183
377	87%	280
378	81%	79
380	107%	162
381	104%	93
Northeast Lafayette Parish.		
384	72%	86
403	72%	80
411	119%	50
415	114%	143
Northwest Lafayette Parish.		
367	60%	72
St. Martin Parish North.		
600	62%	208
605	85%	78
606	77%	121
702	137%	82
Acadia Parish	0%	0
West Region:		
Scott Area		

Table 1.2.10
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Rapid Dwelling Unit Growth –
Classified by Region and Sub-Area -- Percent and Absolute Change – 2000-2030

329	187%	58
330	82%	77
333	72%	113
Duson Southward		
423	93%	190
Congress Street to Johnston Street – West		
305	117%	56
307	60%	131
308	94%	95
312	77%	60
313	119%	294
314	103%	138
316	79%	302
321	268%	321
Johnston Street to Vermilion River – West		
296	136%	94
299	104%	416
300	64%	299
301	70%	156
302	98%	328
Far West Lafayette Parish		
427	77%	64
Vermilion Parish		
907	138%	99
South Region:		
Airport South Along US Hwy 90	0%	0
Broussard Area		
221	147%	173
229	110%	242
236	143%	70
241	169%	161
Vermilion River to Kaliste Saloom Road		
154	97%	460
155	171%	261

Table 1.2.10
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Rapid Dwelling Unit Growth –
Classified by Region and Sub-Area -- Percent and Absolute Change – 2000-2030

290	421%	80
South of K. Saloom Rd to La Neuville Rd		
150	84%	334
151	62%	73
277	65%	291
287	179%	86
288	309%	99
Youngsville Area		
234	65%	73
244	148%	132
248	74%	280
249	98%	225
265	383%	636
271	84%	65
279	100%	227
280	128%	50
281	95%	177
282	151%	395
283	209%	461
Far South Lafayette Parish		
266	199%	147
267	342%	123
Milton Area		
264	94%	236
284	67%	384
291	123%	190
294	149%	70
South St. Martin Parish		
685	118%	53
687	79%	100
694	84%	73
695	96%	86
696	193%	77
Iberia Parish		

Table 1.2.10 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **TAZs with Rapid Dwelling Unit Growth –** **Classified by Region and Sub-Area -- Percent and Absolute Change – 2000-2030**		
850	77%	75
857	90%	110
860	252%	209
East Region:		
Breaux Bridge Area		
615	81%	239
Henderson and St. Martin Parish East		
613	367%	198
657	90%	54
665	100%	77
Western St. Martin Parish		
674	63%	114

1.3.1 Population Age Structure

Table 1.3.1 summarizes the expected changes in the basic age structure of the population in the Study Area over the thirty year projection period. The population is expected to become slightly older, reflective of the general aging trends in the United States. The population under twenty should remain fairly constant, as significant family formation continues in the rapidly growing areas surrounding Central Lafayette.

Map 2-5 summarizes basic age distributions by TAZ for 2000. The map showing percent age 20 to 60 does show that the TAZs with the lower percent in this category are primarily found in Central Lafayette. These TAZs in Central Lafayette contain either slightly higher percents of young people (high birth rates, college students) or slightly higher percents of the elderly (older neighborhoods with older populations). Map 2-6 shows percent female by TAZ. Most of the TAZs are similar to one another, those which are more extreme (very old, mostly female, etc.) usually have very small populations or are primarily institutional.

Table 1.3.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent of Population by Age – 2000-2030

Age Range	2000 (%)	2010 (%)	2020(%)	2030(%)
0-20	31.2	30.5	31.5	31.0
20-60	56.1	55.4	52.6	52.0
60+	12.8	14.1	15.9	17.0

1.3.2 Household Size

Household size is not expected to change dramatically over the thirty year projection period. Households of one and two persons predominate in significant parts of Central Lafayette and in the South Region adjacent to the Vermilion River and Kaliste Saloom Road. Larger households are found in the suburban regions, areas further removed from the City of Lafayette.

The percent of all households containing one and two persons declines slightly over the thirty year projection period, from 56.2 percent to 54.0 percent (see Table 1.3.2). Maps 4-1 to 4-4 show the change in one and two person households over the projection period. The percent of all households containing three and four persons increases slightly over the thirty year projection period, from 34.0 percent to 35.8 percent. The percent of all households containing five or more persons remains almost constant over the thirty year projection period, increasing from 9.9 percent to 10.2 percent. While household size in general over the thirty year projection period is not expected to increase, it does increase slightly in the Study Area as the most rapid population growth is occurring in the TAZs with larger household sizes. Thus growth is concentrated in areas such as Youngsville, Milton, Carencro, Coteau and Breaux Bridge – the household size is not increasing in these areas, but since they tend to have higher initial household sizes – this impacts the overall household size of the Study Area.

Graphs of household size for the Study Area from 2000 to 2030 can be found in Appendix 1, Graph 4 to 6 and graphs of household size by region found in Appendix 2, Graph 14 - 16.

Table 1.3.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Change in Household Size – Study Area – 2000-2030

Household Size	2000 (%)	2010 (%)	2020 (%)	2030 (%)
1-2 person	56.2	55.6	54.4	54.0
3-4 person	34.0	34.5	35.2	35.8
5+ person	9.9	9.9	10.4	10.2
Total	**100%**	**100%**	**100%**	**100%**

1.3.3 Institutional Population

Eleven TAZs are designated as institutional as shown in Table 1.3.3. A majority of the population in these TAZs is classified as institutional and includes dormitories and jails. Several other TAZs, primarily with nursing homes representing twenty to fifty percent of their population, are influenced by an institutional population. Institutional populations are treated differently when doing population projections, as it is assumed that their populations and age structures will remain constant. Thus the elderly nursing home population will simply be replaced by new elderly residents. Dormitories will continue to house predominately young adults, rather than assuming the residents will be ten years older in 2010 than they were in 2000. Institutional populations are excluded from calculation of households and household populations.

The TAZs dominated by institutional populations are noted in Table 1.3.3. The institutional TAZs include jails in Lafayette and Breaux Bridge, dormitories associated with the University of Louisiana at Lafayette, and homes with group living arrangements (labeled Other). Nursing homes also have an important institutional impact, but are found in TAZs where they are less than fifty percent of the total population. The institutional TAZs are highlighted on Map 12-1, including those TAZs with a moderate institutional population influence.

Table 1.3.3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs with Predominant Institutional Populations

TAZ	Pop	Type
6	779	Jail
17	151	Other
38	244	Dormitory
43	294	Dormitory
44	945	Dormitory
45	237	Dormitory
55	26	Other
100	62	Other
105	79	Other
124	30	Other
629	264	Jail

1.4.0 EMPLOYMENT PROJECTIONS

The Lafayette region is projected to have moderate continuous population growth over the next thirty years. Overall employment is expected to grow at a slightly faster rate than the population, as the Lafayette region serves as a regional center for many employment sectors. The City of Lafayette is a retail hub for all of Acadiana. The same is true for many areas of finance, transportation and medical services. The methodology, used to produce these totals, is summarized in Section 1.1.2 and detailed in the employment methodology in Chapter 3.

1.4.1 Employment Change – Study Area

Employment is projected to increase by 36.3 percent over the thirty year projection period. This rate of increase is slightly faster than the population growth rate of 33.7 percent. Growth in retail employment is expected to exceed growth in Other Employment by about four percent over the thirty years (39.5 percent increase versus a 35.3 percent increase). Growth in employment decreases with each decade, mirroring population change (see Tables 1.4.1-1 to 1.4.1-2). Graphs of retail employment and total employment from 2000 to 2030 can be found in Appendix 1, Graph 7 and 8.

Table 1.4.1-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Employment – Study Area - 2000-2030

Type of Employment	**2000**	**2010**	**2020**	**2030**
Retail Employment	28344	32842	36303	39527
Other Employment	86556	97642	107896	117138
Total Employment	**114900**	**130484**	**144199**	**156665**

Table 1.4.1-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Employment Growth Versus Population Growth – Study Area – 2000-2030

Type of Employment	**2000-10 (%)**	**2010-20 (%)**	**2020-30 (%)**	**2000-30 (%)**
Retail Employment	15.9	10.5	8.9	39.5
Other Employment	12.8	10.5	8.6	35.3
Total Employment	13.5	10.5	8.6	36.3
Population	12.2	10.0	8.3	33.0

1.4.2 Retail Employment Change

Retail employment is projected to grow more rapidly than population. The change in retail growth by decade does, however, reflect the growth in population. Retail employment is projected to increase by 39.5 percent from 28,344 in 2000 to 39,527 in 2030. The rate of growth slows from a high of 15.9 percent from 2000-2010, to 10.5 percent from 2010-2020, to 8.9 percent from 2020-2030. The high value from 2000 to 2010 reflects the more rapidly population growth during that decade and the large number of jobs already created from 2000 to 2003.

The study area is divided into a series of retail centers as shown in Map 11-1. Growth depends both on the size of the retail center and the population growth of the area which it serves. Nearly thirty separate retail business centers have been identified and ranked based upon their size (total number of employees) and the variety of goods and services offered (see Employment Methodology report for further discussion). The Acadiana Mall area is designated as the largest retail center. Maps 6-1 to 6-4 illustrate the change in retail employment by decade for all TAZs. The retail focus on the City of Lafayette and upon major transportation is clearly evident.

1.4.21 Retail Employment Change by Region

Retail employment is projected to increase significantly in all five regions as shown in Tables 1.4.21-1 and 1.4.21-2. Central Lafayette contains many of the retail cores (Central Business District, Oil Center, Northgate Mall region) and is expected to grow by 23.9 percent over the thirty year projection period, despite an expected population increase of only 2.3 percent over the same time frame. Many of the retail centers in Central Lafayette draw customers from the entire Study Area. The significant retail employment growth in Central Lafayette is reflective of the overall growth of the Study Area of 33.7 percent from 2000 to 2030. In 2000 the Central Lafayette region contained nearly one-half of the retail employees (48.1 percent), this portion expected to decline to 42.8 percent by 2030. The regions to the south and east are expecting the greatest percent increase in retail employment. Rapid population growth, improvements in transportation and room for expansion all contribute to the substantial retail employment growth in the East Region (68.5 percent) and in the South Region (65.4 percent) from 2000 to 2030. Important new retail cores are likely in the South Region as Ambassador Caffery Parkway South is completed and Interstate 49 is extended southward. Substantial growth of retail employment is projected for the Breaux Bridge and areas along Interstate 10 in the East Region. The North Region is projected to increase its retail employment by 53.0 percent. The West Region is projected to have a more modest increase of 38.3 percent. Significant retail employment in the West Region is expected to spread southwestward along Johnston Street, but growth in other parts of the region is likely to be more limited.

Graphs retail employment by region from 2000 to 2030 can be found in Appendix 2, Graph 17 and 18.

Table 1.4.21-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Retail Employment Change by Region – 2000-2030

Region	2000	2010	2020	2030
Central Lafayette	13647	14973	15918	16903
North Region	2432	2973	3345	3720
West Region	5299	6224	6801	7326
South Region	5117	6437	7553	8463
East Region	1849	2235	2686	3115
Total	**28344**	**32842**	**36303**	**39527**

Table 1.4.21-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Retail Employment Change by Region – 2000-2030

Region	2000-10 (%)	2010-20 (%)	2020-30 (%)	2000-30 (%)
Central Lafayette	9.72	6.31	6.19	23.86
North Region	22.23	12.51	11.21	52.96
West Region	17.46	9.27	7.77	38.25
South Region	25.80	17.34	12.05	65.39
East Region	20.88	20.18	15.97	68.47
Total	**15.87**	**10.54**	**8.88**	**39.45**

1.4.22 Retail Employment Change by Service Areas

Reflective of the significant growth in the entire Study Area over the thirty year projection period, all of the larger retail centers are expected to increase their number of employees in Table 1.4.22. Map 11-1 delineates the TAZs found in each service area. The largest retail service area is centered on the Acadiana Mall. It is expected to increase by a modest 20.7 percent, as a lack of space for further expansion begins to impact the growth rate. One of the most rapidly growing areas is Johnston Street South, as retail growth centers on the area extending from the Acadiana Mall toward Vermilion Parish as this area is projected to have more than five times as many employees in 2030 as it had in 2000. The other dynamic growth area is associated with the extension of Interstate 49 southward. The Broussard area is projected to increase its retail employment by 120.3 percent and the South Highway 90 area (to become Interstate 49) by 735.3 percent. This area which includes TAZs in Lafayette, St. Martin and Iberia Parishes is projected to increase from 71 to 522 employees over the thirty year projection period. Associated with the rapid growth of population north of Youngsville and the completion of Ambassador Caffery Parkway South, retail employment in the Youngsville extended region is expected to increase 253 percent.

Rapidly growing retail areas are also seen to the north and east of Lafayette. Breaux Bridge and Henderson are each projected to increase their number of retail employees by over seventy-five percent between 2000 and 2030. To the north, University Avenue and

Carencro are each expected to increase their number of retail employees by over sixty percent.

Modest gains in employment are expected in the retail centers located with the Central Lafayette Region. The Central Business District is expected to grow by 25.1 percent, the Oil Center area by 17.2 percent and the Northgate Mall/NE Lafayette area by 24.5 percent over the thirty year projection period. The high percent increase in the Mire area of Acadia Parish is primarily a function of a low count of employees in 2000, and the increase represents a small number of individuals (see Map 6-1).

Table 1.4.22
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Retail Employment Change by Retail Service Area[1] – 2000-2030

Retail Service Area	2000	2030	Change	Percent Change
Acadiana Mall	6550	7903	1353	20.70%
Pinhook South	2510	3456	946	37.70%
Johnston St.- Intown	2472	2932	460	18.60%
Oil Center	1932	2265	333	17.20%
Kaliste Saloom Rd.	1704	2486	782	45.90%
Northgate Mall/NE Lafayette	1668	2077	409	24.50%
Ambassador Caffery-north	1568	2878	1310	83.50%
I-49/NE	1565	2115	550	35.10%
Breaux Bridge	1397	2444	1047	75.00%
Saints Streets area	1394	1617	223	16.00%
Louisiana Ave./E. Lafayette	1052	1241	189	18.00%
University Ave./Willow	867	1051	184	21.30%
Broussard	745	1642	897	120.30%
Congress St.	603	694	91	15.20%
Lafayette CBD	487	609	122	25.10%
Carencro	446	730	284	64.70%
Henderson	425	762	337	79.30%
University Ave. N	295	511	216	73.10%
Scott	181	267	86	47.60%
Johnston St. South	119	636	517	434.60%
Youngsville Vicinity	75	265	190	253.00%
Duson	74	98	24	32.00%
South Hwy 90	71	593	522	735.30%
Maurice	65	126	61	93.80%

[1] Acadia, Regional Airport, and St. Martin Parish Service Areas are not listed in this analysis. See Section 3.2.1 for a complete list.

1.4.23 Retail Employment Change by TAZ

Table 1.4.23-1 lists those TAZs which increased their number of retail employees from 2000 to 2030 by at least fifty and also had at least a fifty percent increase. These TAZs are found in all five regions. The TAZs which had no retail employees in 2000, but have increased to at least fifty in 2030 are found along major transportation lines where improvements are expected to dramatically impact the TAZ.

Table 1.4.23-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Retail Employment – by Region and TAZ – by Percent – 2000-2030

TAZ	2000	2030	Percent Change
Central Lafayette Region			
167	323	533	65.0%
179	3	238	7833.3%
187	94	144	53.2%
194	0	84	---
West Region			
295	174	286	64.4%
299	8	129	1512.5%
302	0	53	---
313	109	228	109.2%
314	0	83	---
323	219	597	172.6%
South Region			
133	7	158	2157.1%
155	278	550	97.8%
221	59	109	84.7%
225	57	147	157.9%
226	188	342	81.9%
232	202	321	58.9%
240	0	81	---
289	49	109	122.4%
695	54	141	161.1%
696	0	98	---
697	0	59	---

Table 1.4.23-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Retail Employment – by Region and TAZ – by Percent – 2000-2030

TAZ	2000	2030	Percent Change
699	0	90	---
700	0	106	---
North Region			
202	0	83	---
212	291	452	55.3%
387	103	169	64.1%
391	185	303	63.8%
608	5	67	1240.0%
East Region			
612	95	160	68.4%
614	34	94	176.5%
615	169	288	70.4%
616	525	895	70.5%
627	99	169	70.7%
629	78	133	70.5%
631	80	136	70.0%
640	103	176	70.9%

Table 1.4.23-2 lists TAZs with absolute increases of two hundred or more in retail employment from 2000 to 2030. Many of the TAZs are also found in the above table, having also increased by more than fifty percent.

Table 1.4.23-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Retail Employment – by Region and TAZ – by Absolute Numbers – 2000-2030

Region and TAZ	2000	2030	Change
Central Lafayette Region			
167	323	533	210
179	3	238	235
West Region			
297	2575	3014	439
315	1431	1675	244

323	219	597	378
South Region			
155	278	550	272
North Region	0	0	0
East Region			
616	525	895	370

1.4.3 Other Employment (Non-Retail) Change

Other employment (non-retail) is projected to grow slightly more rapidly than population. Other Employment is projected to increase by 35.3 percent from 86,556 in 2000 to 117,138 in 2030. The rate of growth slows from a high of 12.8 percent from 2000-2010, to 10.5 percent from 2010-2020, to 8.6 percent from 2020-2030. Maps 5-1 to 5-4 detail change in Total Employment from 2000 to 2030. These maps combine both retail and other employment. Graphs of total employment from 2000 to 2030 can be found in Appendix 1, Graph 7 and 8.

1.4.31 Other Employment (Non-Retail) Change by Region

Other employment (non-retail) is projected to increase significantly in all five regions as shown in Tables 1.4.31-1 and 1.4.31-2. The difference between the five regions is much smaller than for population, dwelling unit or retail employment growth. The values range from a low of 33.9 percent growth in the Central Lafayette Region to 38.4 percent for the West Region. Other Employment is not as directly driven by population growth as are many other variables (see Employment Methodology report for further discussion in Chapter 3). The Central Lafayette Region and the South Region contain the vast majority of employees in this category. Half the employees are located in Central Lafayette and over thirty percent in the South Region. Much of the industrial, wholesaling, transportation, finance and mining employment in the Study Area has historically been found in Central Lafayette and areas to the south. Graphs of total employment from 2000 to 2030 by region can be found in Appendix 2 in Graph 17 and 18.

Table 1.4.31-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Other Employment Change by Region – 2000-2030

Region	**2000**	**2010**	**2020**	**2030**
Central Lafayette	43547	48811	53611	58322
North Region	5962	6766	7455	8040
West Region	5804	6767	7452	8033
South Region	28227	31883	35591	38633
East Region	3016	3393	3766	4088
Total	**86556**	**97620**	**107875**	**117116**

Table 1.4.31-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Other Employment Change by Region – 2000-2030

Region	2000-10 (%)	2010-20(%)	2020-30 (%)	2000-30 (%)
Central Lafayette	12.09	9.83	8.79	33.93
North Region	13.49	10.18	7.85	34.85
West Region	16.59	10.12	7.80	38.40
South Region	12.95	11.63	8.55	36.87
East Region	12.50	10.99	8.55	35.54
Total	**12.78**	**10.51**	**8.57**	**35.31**

1.4.32 Other Employment (Non-Retail) Change by TAZ

Table 1.4.32-1 lists those TAZs which increased their number of Other Employment employees from 2000 to 2030 by at least fifty and also had at least a fifty percent increase. These TAZs are found in four of the five regions. There are far fewer TAZs which meet the same conditions as compared to retail employment.

Table 1.4.32-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Other Employment – by TAZ – by Percent – 2000-2030

TAZ	2000	2030	Percent Change
Lafayette Central Region			
57	156	251	60.9%
118	128	238	85.9%
166	256	469	83.2%
178	97	192	97.9%
196	12	127	958.3%
West Region			
440	0	70	---
314	90	197	118.9%
317	173	281	62.4%
South Region			
135	18	95	427.8%
140	373	589	57.9%
150	300	560	86.7%
232	112	171	52.7%

Table 1.4.32-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Other Employment – by TAZ – by Percent – 2000-2030

TAZ	2000	2030	Percent Change
235	114	224	86.5%
236	129	215	66.7%
268	188	384	104.3%
282	108	234	116.7%
293	115	173	50.4%
699	297	600	102.0%
North Region			
401	254	400	57.5%
East Region	0	0	0.0%

Table 1.4.32-2 includes additional TAZs with absolute increases of two hundred or more in Other Employment from 2000 to 2030. Four of the TAZs are found in the above table, having increased by more than fifty percent. It can be seen that these TAZs are concentrated in Central Lafayette and the South Region. Approximately eighty percent of Other Employment is found in these two regions.

Table 1.4.32-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Other Employment – by Region and TAZ – by Absolute Numbers – 2000-2030

TAZ	2000	2030	Increased Workers
Central Lafayette Region			
5	1248	1646	398
30	1368	1802	434
35	2817	3820	1003
36	767	1056	289
43	673	901	228
44	1103	1473	370
49	2561	3499	938
56	1808	2424	616
107	788	1042	254
121	596	805	209
160	666	884	218
166	256	469	213
169	946	1225	279

Table 1.4.32-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Rapid Growth in Other Employment – by Region and TAZ – by Absolute Numbers – 2000-2030

TAZ	2000	2030	Increased Workers
184	1858	2526	668
185	636	836	200
187	761	997	236
198	709	935	226
West Region			
325	1039	1403	364
South Region			
124	1522	2045	523
128	758	981	233
131	574	850	276
132	1188	1582	394
139	1590	2071	481
144	2020	2587	567
147	1204	1574	370
140	373	589	216
150	300	560	260
152	1975	2611	636
153	888	1197	309
225	657	899	242
229	846	1077	231
231	1792	2448	656
North Region			
212	856	1110	254
East Region			
615	694	941	247
699	297	600	303

1.5.0 SCHOOL ATTENDANCE AND EMPLOYMENT

School attendance and employment are projected separately for each school for each decade. Overall school attendance is expected to increase at a slightly slower rate than the population as a whole, reflective of the aging of the population in the study area. The rate of growth decreases with each decade, mirroring population change. School employment projections are reflective of attendance changes in each school. Maps 7-1 to 7-4 summarize the change in school attendance by TAZ.

1.5.1 Methodology

Attendance projections for public and Catholic elementary, junior (middle) and high schools are based upon population growth in their surrounding TAZs. Specifically, growth in the number of school age individuals is used, augmented by overall population growth as overall growth numbers are more reliable than age structure numbers. Attendance projections for other schools (religious and independent) are based upon the overall growth rate of the study area, as it is assumed that these schools do not draw from within limit boundaries, but rather from a much larger area. Trade schools and commercial colleges also have their growth based upon growth of the study area. The University of Louisiana at Lafayette is analyzed separately.

In determining the population in the TAZs surrounding individual schools, current attendance zones or boundaries are not utilized. It is assumed that attendance zones and boundaries will change numerous times over the projection periods. Hence, geographically adjacent areas are grouped together. Since separate school districts exist in each parish, parish boundary lines are not crossed when assigning TAZs. Further details on the methodology used can be found in the Employment Methodology report in Section 3.4.0 of Chapter 3.

1.5.2 School Attendance – Study Area

School enrollment, when university and adult education is included, is expected to increase at an almost identical rate to population as shown in Tables.1.5.2-1 and 1.5.2-2. From 2000 to 2030, school enrollment is projected to increase by 33.5 percent, while population in the Study Area is projected to increase by 33.7 percent. Enrollment in grades K-12 should increase at a slightly slower rate than the population (see Table 1.5.2-1). The growth rate decreases each decade, reflective of decreasing population growth each decade during the projection period. Graphs of school attendance from 2000 to 2030 can be found in Appendix 1, Graph 9.

Table 1.5.2-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
School Attendance – Study Area - 2000-2030

Grade Level	**2000**	**2010**	**2020**	**2030**
Grades K-12	42804	47858	52474	56781
Univ. of Louisiana at Lafayette	14060	17013	18033	19115
Other Adult Education	858	963	1058	1146
Total	**57722**	**65834**	**71565**	**77042**

Table 1.5.2-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
School Attendance (Grades K-12) and Population Growth

Time Period	Population Growth	Percent Growth
2000-2010	12.2%	11.8%
2010-2020	10.0%	9.6%
2020-2030	8.3%	8.2%

1.5.3 School Attendance by Region

School enrollment increases significantly in all regions, including the Central Lafayette area as described in Tables 1.5.3-1 and 1.5.3-2 Several of the schools located within the Central Lafayette region draw students from beyond that region. While K-12 growth is the slowest in Central Lafayette of the five regions from 2000 to 2030, the rate of 19.8 percent is significantly higher than the population growth rate of 2.3 percent. The South Region has the fastest growing population and also can expect the greatest increase in school enrollment, 55.6 percent over the thirty years. Some of the elementary schools in the South Region can expect a more than one hundred percent increase in students over the projection period. Some of the most rapidly growing schools are found in TAZ 268 in Youngsville, TAZ 282 north of Youngsville and TAZ 863 in Iberia Parish. From 2000 to 2030, school enrollment is projected to increase from 1134 to 2200 in TAZ 268, from 743 to 1489 in TAZ 282, and from 663 to 1208 in TAZ 863. Graphs of school attendance from 2000 to 2030 by region can be found in Appendix 2 in Graph 19. The Central Lafayette Region appears very strong due to the inclusion of attendance at the University of Louisiana at Lafayette.

Table 1.5.3-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
School Attendance by Region – 2000-2030

Region	2000	2010	2020	2030
Central Lafayette	30390	34452	36418	38277
without UL-Lafayette	*18830*	*20464*	*21592*	*22561*
North Region	6938	7693	8416	9147
West Region	7973	9045	9897	10644
South Region	9459	11252	13001	14720
East Region	2962	3392	3833	4254
Total	**57722**	**65834**	**71565**	**77042**

Table 1.5.3-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Percent Growth of School Attendance by Region – 2000-2030

Region	**2000-10 (%)**	**2010-20 (%)**	**2020-30 (%)**	**2000-30 (%)**
Central Lafayette	13.37	5.71	5.10	25.95
without UL-Lafayette	*8.68*	*5.51*	*4.49*	*19.81*
North Region	10.88	9.40	8.69	31.84
West Region	13.45	9.42	7.55	33.50
South Region	18.96	15.54	13.22	55.62
East Region	14.52	13.00	10.98	43.62
Total	**14.05**	**8.71**	**7.65**	**33.47**

1.5.4 School Employment Projections

School employment projections are reflective of attendance changes in each school. Based upon 2000 employment, ratios of employees to students are maintained in the projections. These ratios can differ significant between elementary and high schools and between public and private schools. Thus if enrollment in a school is expected to increase by ten percent from 2000 to 2010, its number of employees is also projected to increase by ten percent from 2000 to 2010. Thus calculation of number of employees within education is projected independently of any of the other employment projections. The employment in education is treated as a part of Other Employment, and included in those projections (see Section 3.4.0).

2.0 POPULATION AND DWELLING UNIT METHODOLOGY

2.1.0 INTRODUCTION

Good population projections are the result of having good historic data, a knowledge of current conditions, and an understanding of likely future activities. Based on such information, projections can be an excellent indicator for those concerned with long-range urban planning. Projections can never predict exact behavior with precision. Projections tell us what is most likely to happen given current knowledge. Projections can then be modified to incorporate new knowledge and information as it becomes available.

Population and dwelling unit projections from 2000 to 2010 are done with the goal of maximum accuracy. Increased accuracy is possible as one possesses recent data (2000), updated by current information (2003), and a greater awareness of short-term trends (2003-2010). Therefore, the methodology for the 2010 projections differs from the long-range projections and takes into account recent residential construction (2000-2003), approved transportation improvements, very recent growth trends, and population aging (births and deaths). While this methodology is not designed for quick updating, it can be shortened to a formula to allow good approximations where it is seen that major changes need to be made. The more detailed methodology used for this decade should provide a reliable base for 2010; the base the long range projections rely upon.

Population and dwelling unit projections for 2020 and 2030 are done with the goal of maximum flexibility; thus allowing easy updating when additional information becomes available. The methodology includes a simplified population aging formula, impacts from long-range interstate highway construction, past growth trends, amount of available residential land and proximity to developed residential areas, and designation of likely multifamily dwelling locations. Greater flexibility is needed for long-range projections so that they can be modified to reflect the unexpected occurrences which are likely to happen (e.g., a new subdivision in an unexpected location). The projected number of dwelling units in 2010 and their expected growth from 2000 to 2010 are used as the basic inputs into the 2020 and 2030 projections. With the release of the 2010 census, projection numbers can be replaced to reflect actual counts.

All population and dwelling unit projections are done at the Traffic Analysis Zone (TAZ) level. Each TAZ is projected independently from all others. Thus TAZs can be grouped together in any way which facilitates an improved understand of the data. TAZs are grouped geographically to check on regional and directional bias, and functionally grouped to unite TAZs with similar characteristics. In the Final Report TAZs are grouped in other ways for ease of interpretation and presentation of results.

Official state projections by parish provide the control totals for the population in 2010, 2020, and 2030. These state projections were done in 1997 and are updated to

incorporate results of the 2000 census. While control totals are kept in mind when projecting population and dwelling units, each TAZ is still looked at individually and its likely growth assessed. As a result, the 2010 total is modestly above state projection numbers. This reflects the extensive residential construction within Lafayette Parish (and the portion of Iberia Parish within the study area) which has taken place from 2000 to 2003. Future totals continue to reflect the official state projections, but can be easily augmented to reflect either more rapid or slower growth.

While the methodology contains numerous formulas and represents a quantitative approach to the problem, it should be remembered that formulas are simply an amalgam of subjective decisions. Formulas make it easier to replicate the process and to change assumptions, but one still must decide which variables to include and the relative weight of each variable. Therefore, it is appropriate to present an overview of basic guiding principles or assumptions used in formulating the methodology.

1. Unless given knowledge to the contrary, past trends are likely to continue.
2. Life cycle stages continue and life cycle events are associated with both population and dwelling unit change (age-specific events such as leaving home, marriage, births, retirement, death).
3. Lack of available land limits residential construction. Availability of large tracts of land is more conducive for the development of major subdivisions.
4. Land immediately adjacent to major transportation arteries is more likely to have commercial or industrial uses than single family residential use. But the presence of such arteries encourages residential growth in the region.
5. Population growth can generate new commercial activity. New commercial activity can also encourage residential growth (multifamily dwellings adjacent and single family dwellings in the region).
6. Areas within the flood plain are less likely to be developed. Areas with significant wetlands are very unlikely to have extensive residential development.
7. Growth is most likely to occur in areas adjacent to developed areas. Infrastructure is more readily available and urban amenities and services more accessible.
8. Incentives will continue from many levels of government to encourage development (and redevelopment) within currently developed areas. This reduces new utility and other infrastructure costs and can concentrate and focus the disbursement of services.

2.2.0 CONTROL TOTALS FOR POPULATION PROJECTIONS

2.2.1 State of Louisiana Population Projections

Official State of Louisiana Population Projections are used as the base to determine total population growth for the study area. The last official state population projections were done in 1997 by Michael Irwin with the Louisiana Population Data Center at Louisiana State University. The projections were prepared for the Office of Planning and Budget, Division of Administration for the State of Louisiana. This data set includes projections

by parish to 2000, 2005, 2010, 2015 and 2020 (with a statewide projection to 2025 provided by the U.S. Census). The next update is likely in late 2004, too late to be included in this project.

Table 2.2.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
State Population Projections for Lafayette Parish

2000	188,620[2]
2010	206,380
2020	222,130
2030	234,715[3]

2.2.2 State Projections Adjusted to Incorporate the 2000 Census

Results from the 2000 census are incorporated to produce new totals based upon the 1997 projections. An example of the procedure is illustrated for Lafayette Parish in the table below.

Table 2.2.2-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Adjusting Lafayette Parish Population Totals

Data Set	Population	Comments - Rate of Increase
1990 Population	165,230	
2000 Population (as projected in 1997)	188,620	14.16% increase
Actual 2000 Population (Census)	190,503	15.30% increase
2010 (as projected in 1997)	206,380	9.42% increase
Modified to reflect Census	209,972	10.22% (8.05% faster than 9.42%)
2020 (as projected in 1997)	222,130	7.63% increase
Modified to reflect Census	227,163	8.28% (8.05% faster, using new 2010 total
2030 (estimate from 1997 projections) [4]	237,612	6.97% increase
Modified to reflect Census	244,268	7.53% (8.05% faster, using new 2020 total)

[2] The actual 2000 census total is 190,503.
[3] This figure is an estimate from U.S. Census Bureau state projection
[4] The 1997 projections exist only to 2020. The state rate for 2020-2025 is expected to slow to be 91% of 2015-2020 rate) – approximately 6.97%

Similar procedures are used to calculate modified state projection totals for Acadia, Iberia and St. Martin parishes. Expected increases are then allotted to the study area based upon its share of the growth occurring during the 1990s. Acadia Parish is presented as an example in Table 2.2.2-2. The other surrounding parishes are summarized in Table 2.2.2-3.

Table 2.2.2-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Adjusting Acadia Parish Population Totals

Data Set	**Population**	**Comment**
Acadia Parish		
1990 Population	55,730	
2000 (as projected in 1997) Population	58,810	5.53% increase
Actual 2000 population (Census)	58,861	5.62% increase (1.6% faster)
2010 (as projected in 1997)	61,560	4.68% increase
Modified to reflect Census	61,657	4.75% (1.6% faster)
Increase 2000 – 2010	2,794	
Study area population	3.62% of Acadia Parish population	
Study area growth 1990-2000	294	
Acadia Parish growth 1990-2000	3131	
Percent of Acadia parish growth in Study area	9.39%	
Study area 2000-2010 projected growth[5]	9.39% x 2,794 = 263	

Table 2.2.2-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Initial Control Totals by Adjoining Parish

Acadia Parish (part in the study area)	
1990	1833
2000	2127
2010	2390
2020	2729
2030	3056
Iberia Parish (part in the study area)	
1990	2535
2000	3410

[5] The process is repeated for 2020 and 2030.

Table 2.2.2-3 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **Initial Control Totals by Adjoining Parish**	
2010	4248
2020	5264
2030	6187
St. Martin Parish (part in the study area)	
1990	17114
2000	20277
2010	23390
2020	26863
2030	30316

Vermilion Parish presents unique problems as illustrated in Table 2.2.2-4. While the 1997 state projection indicated a growth rate of 2.94% from 1990 to 2000, the actual growth rate was 7.64%. This would indicate the parish is growing 260% faster than initially thought. It is not reasonable to think that Vermilion Parish will continue to grow 260% faster than originally projected. Nor is that rapid increase justified based on the limited amount of residential construction from 2000 to 2003. Furthermore, estimates by the Census Bureau and the State show the population for Vermilion Parish experiencing almost no growth from 2000 to 2002 (0.57%). Therefore, the Vermilion Parish total for 2010 is arrived at by accumulating its individual TAZs using the same methodology as for the other TAZs in the other parishes. The result is a growth rate of 4.82%. State projection rates are then used for 2020 and 2030.

Table 2.2.2-4 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **Vermilion Parish Control Totals**	
Vermilion Parish (part in the study area)	
1990	2086
2000	2578
2010	2903
2020	3309
2030	3699

2.2.3 Study Area Projection Totals

For Lafayette, Acadia, Iberia, and St. Martin Parishes residential building construction from 2000 to 2003 fully supports their rate of increase to 2010. For Lafayette Parish and Iberia Parish extensive construction necessitated a modest increase in the totals for 2010.

The control values for each parish are only used as a guide. Each TAZ is independently evaluated and uniform guidelines applied to all TAZs regardless of the parish in which they are located. Working upward from the TAZ level creates slightly higher study area totals than the initial control totals. This is not surprising, in that the 2010 projection values are purposefully augmented to reflect recent high construction levels. Nonetheless, the rate of growth for the study area remains similar and consistent with the control totals derived from the state projections. Moderate and consistent population growth is projected for the entire study area for each decade.

Table 2.2.3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Original and Adjusted Population Totals for Study Area

Study Area – Original Control Totals		
2000	218,895	
2010	241,512	10.33% rate of increase 2000-2010
2020	265,286	9.84% rate of increase 2010-2020
2030	287,481	8.37% rate of increase 2020-2030
Study Area – Adjusted Projection Numbers		
2000	218,895	
2010	245,619	12.20% rate of increase 2000-2010
2020	270,203	10.01% rate of increase 2010-2020
2030	292,598	8.30% rate of increase 2020-2030

2.3.0 COHORT COMPONENT PROCEDURE

Cohort component methodology involves utilizing appropriate techniques to determine expected births and deaths in a given population over time. This procedure may also be used to help determine migration. This cohort component methodology is used for the all projections, applied individually to each TAZ each decade.

2.3.1 Survival Rates

Survival rates are calculated from the most recent United States life tables (2000), separately for males and females. Survival rates are calculated in ten-year age intervals and applied individually to each TAZ. The life table represents 100,000 people all experiencing 2000 United States mortality rates. For example, with a group of 100,000 males age 0-10, 99,696 would be expected to survive to become 10-20 years old ten years later (a survival rate of .99696). Analogously, of 100,000 males aged 70-80, 48,423 would be expected to survive to become 80-90 years old ten years later (a survival rate of .48423). The male and female survival rates utilized are shown in Tables 2.3.1-1 and 2.3.1-2 The same survival rates are used for all TAZs for all decades. Several TAZs

from the Breaux Bridge area are used to illustrate the method, as they provide a wide variety of population age structures and dwelling unit and population growth rates.

Table 2.3.1-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Female Survival Calculations

					2000					
AGE	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80+	Total
TAZ 614	0	0	0	0	0	0	0	2	0	2
TAZ 615	110	59	87	71	47	42	17	35	98	566
TAZ 616	12	15	12	13	20	22	4	4	5	107
TAZ 618	7	10	2	9	5	1	6	2	1	43
TAZ 620	27	21	23	26	23	3	4	1	2	130
TAZ 627	210	200	132	129	122	93	73	37	5	1001
TAZ 642	15	11	10	12	6	7	6	4	3	74
TAZ 649	7	2	4	7	2	3	3	3	3	34
Survival Rate	**0.998**	**0.996**	**0.993**	**0.985**	**0.967**	**0.921**	**0.818**	**0.594**	**0.217**	
					2010					
TAZ 614	0	0	0	0	0	0	0	1.188	0	1.188
TAZ 615	109.783	58.750	86.404	69.964	45.457	38.682	13.914	20.791	21.234	464.979
TAZ 616	11.976	14.936	11.918	12.810	19.344	20.262	3.274	2.376	1.083	97.980
TAZ 618	6.986	9.958	1.986	8.869	4.836	0.921	4.911	1.188	0.217	39.871
TAZ 620	26.947	20.911	22.842	25.621	22.245	2.763	3.274	0.594	0.433	125.630
TAZ 627	209.586	199.152	131.096	127.118	117.996	85.653	59.748	21.979	1.083	953.411
TAZ 642	14.970	10.953	9.932	11.825	5.803	6.447	4.911	2.376	0.650	67.867
TAZ 649	6.986	1.992	3.973	6.898	1.934	2.763	2.455	1.782	0.650	29.433

Table 2.3.1-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Male Survival Calculations

					2000					
AGE	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80+	Total
TAZ 614	0	0	0	0	0	0	0	0	2	2
TAZ 615	120	66	63	33	32	34	20	17	26	411
TAZ 616	11	9	15	12	17	20	6	4	1	95
TAZ 618	8	5	2	14	3	1	4	0	0	37
TAZ 620	35	27	18	22	16	8	4	2	0	132

Table 2.3.1-2 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **Male Survival Calculations**										
TAZ 627	193	189	95	100	110	51	46	17	7	808
TAZ 642	15	15	9	7	9	7	6	3	1	72
TAZ 649	2	7	2	3	7	2	4	3	0	30
Survival Rate	**0.997**	**0.988**	**0.985**	**0.974**	**0.944**	**0.876**	**0.734**	**0.484**	**0.164**	
					2010					
TAZ 614	0	0	0	0	0	0	0	0	0.328	0.328
TAZ 615	119.635	65.227	62.074	32.135	30.204	29.788	14.689	8.232	4.263	366.248
TAZ 616	10.967	8.895	14.780	11.685	16.046	17.523	4.407	1.937	0.164	86.402
TAZ 618	7.976	4.941	1.971	13.633	2.832	0.876	2.938	0.000	0.000	35.166
TAZ 620	34.894	26.684	17.735	21.423	15.102	7.009	2.938	0.968	0.000	126.754
TAZ 627	192.413	186.787	93.604	97.378	103.828	44.683	33.786	8.232	1.148	761.857
TAZ 642	14.954	14.824	8.868	6.816	8.495	6.133	4.407	1.453	0.164	66.114
TAZ 649	1.994	6.918	1.971	2.921	6.607	1.752	2.938	1.453	0.000	26.554

2.3.2 Birth Rates

Births are calculated using a ratio method. For each individual TAZ the number of males and females aged 0-10 is compared to the number of females aged 20-40. This ratio is then applied to the number of females aged 20-40 in 2010. This number is then multiplied by the ratio to determine expected number aged 0-10 in 2010 (hence, number of births from 2000 to 2010). Later in the process, additional births and young children of in-migrants are included. This process takes the newly projected age structures and is repeated for the 2020 and 2030 projections. The ratio method has several advantages over trying to apply crude or age-adjusted birth rates. This ratio of children to women of child-bearing age does a good job of taking into account any racial or ethnic differences. Likewise, areas which are partially or predominately populated by women of childbearing age who are students (generally with much lower fertility rates than those in family raising areas) will have a low ratio of children to women of childbearing age. Several examples of TAZs from the Breaux Bridge area are used to illustrate the birth calculations in Table 2.3.2.

Table 2.3.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Fertility Calculations

A	B	C	D	E	F
TAZ	Male & Female Age 0-10 Year 2000	Female Age 20-40 Year 2000	Ratio Column B to A	Female Age 20-40 Year 2010	Multiply Column D x E
614	0	0	0	0	0
615	230	158	1.46	145.1	211.3
616	23	25	0.92	26.8	24.7
618	15	11	1.36	11.9	16.3
620	62	49	1.27	43.8	55.4
627	403	261	1.15	330.2	379.8
642	30	22	1.36	20.9	28.5
649	9	11	0.82	6.0	4.9

2.3.3 Examples of Survival and Birth Rates Applied to TAZs

The three previous tables (2.3.1-1, 2.3.1-2, 2.3.2) provide a variety of examples to illustrate how the cohort component procedure works. TAZ 614 in 2000 contains two females in their 70s and two males in their 80s. Survival rates indicate 1.18804 females and .32792 males surviving to 2010. The fertility ratio (males and females 0-10/females 20-40) is zero, and hence population 0-10 in 2010 is zero. From a population of 4 in 2000, the total population in 2010 is projected to be 1.51596, plus or minus expected migration.

TAZ 615 has a much younger population. For 110 females aged 0-10 in 2000, 109.78 are expected to survive ten years to become the population age 10-20 in 2010. For the 34 males aged 50-60 in 2000, 29.79 are expected to survive then years to become the population age 60-70 in 2010. Survival rates indicate that 465 of the 566 females in 2000 should survive to 2010. Survival rates indicate that 366 of the 411 males in 2000 should survive to 2010. The fertility ratio is a relatively high 1.46, producing a population of 211.3 ages 0-10 in 2010. From a population of 977 in 2000, the total population in 2010 is projected to be 1042 (465 + 366 + 211), plus or minus expected migration.

TAZ 616 has an older age structure, with a large portion of its population in their fifties. Survival rates indicate 98 females and 86 males surviving from 2000 to 2010, decreasing the population from 202 to 184. The fertility ratio is only .92, resulting in 25 people age 0-10 in 2010. From a population of 202 in 2000, the total population in 2010 is projected to be 209 (98+86+25), plus or minus expected migration.

2.3.4 Exceptions to the Survival and Birth Rates

The cohort component method is disregarded in several special cases. Where the population is predominantly institutional (more than fifty percent), such as dormitories, nursing homes, or jails – the assumption is that the age structure of the population will remain constant over the projection period. Thus the elderly nursing home population will simply be replaced by new elderly residents. Dormitories will continue to house predominately young adults, rather than assuming the residents will be ten years older in 2010 than they were in 2000. Therefore the total population and age structure of these institutional TAZs remains constant over all projection periods. Eleven TAZs are designated as institutional (TAZs 6, 17, 38, 43, 44, 45, 55, 100, 105, 124, and 629). Several other TAZs (primarily TAZs with nursing homes representing twenty to fifty percent of their population) have their totals slightly adjusted to reflect a constant elderly population.

The birth ratio is altered slightly for several TAZs each decade when it appears the rates are unreasonably low or high. Examples are areas which are being rapidly converted from rural agricultural areas to subdivisions with young families. The past ratio fails to take into the account the new dynamics of the younger population. Conversely, an area of single family dwellings which has a new large apartment complex might expect to see its birth ratio lowered in the new decade.

2.3.5 Checking Reasonableness of Survival Rates and Birth Rates

To check the reasonableness of the cohort component method as used in this projection, one can compare the number of births and deaths it produces over the ten year projection with recent numbers of births and deaths in Lafayette Parish.

Table 2.3.5
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Historic Data -- Lafayette Parish Births and Deaths--by place of usual residence –

Year	Birth	Deaths
1996	2830	1179
1997	2871	1232
1998	2964	1298
1999	2889	1426
2000	2834	1360
2001	2860	1372
Average 1996-2001	2874	1311
Projection 2000-2010		
14,131 deaths	1431 per year average	
28,217 births	2821 per year average	

The results for Lafayette Parish demonstrate that the numbers are reasonable and provide a good check on cohort component methodology. The 2000-2010 projection for Lafayette Parish averages 1431 death per year and 2821 birth per year. The number of deaths per year, while slightly higher than 2000 and 2001, would appropriately reflect a slightly larger population by 2010. For these projections no change in basic mortality rates is assumed. The number of births remains similar to the current values; this could reflect a slight decline in fertility rates as the population size increases and or constant rates as the population becomes slightly older. A slight decline in fertility is a common assumption utilized in projections to 2010. If necessary, these assumptions can be changed to reflect future rates.

2.3.6 Migration Component.

Under the methodology used in this report, population change is created both from natural increase (births versus deaths) and migration. The expected number of in-migrants is drawn primarily from the number of new dwelling units added in each TAZ. Out-migrants are estimated based on the proportion of the age structure in each TAZ which is in age groups that traditionally out-migrate.

The migration age structures used are drawn from analyzing the age structure of all migrants in Louisiana (2000 Census data) – this representing both those who in-migrate and those who out-migrate – combined to create net migration. To arrive at separate age distributions for in-migrants and out-migrants, numerous census tracts within Lafayette Parish are analyzed. The 1990 populations of these census tracts is subjected to cohort survival rates and birth rates to compare their expected populations in 2000 with their actual 2000 populations. The difference between the expected and actual populations is the net migration. The net migration age structure of very rapidly growing tracts helps form the age structure for the in-migrants, as the vast majority of the migrants in these tracts are, indeed, moving into the area. The net migration age structure of tracts with declining populations helps form the age structure for the out-migrants, as the vast majority of the migrants in these tracts are, indeed, moving out of the area.

The percentages in Table 2.3.6-1 are used to create the age structure for the in-migrants and the percentages in Table 2.3.6-2 used to create the age structure for the out-migrants. Projection years 2000 to 2010 are used in this example, but the values apply to all projection decades.

Table 2.3.6-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Age Structure of In-Migrants

Age in Year 2000	Age in Year 2010	Percentage (%)
	0-10	18.6
0-10	10-20	15.1
10-20	20-30	20.1
20-30	30-40	16.0
30-40	40-50	16.5
40-50	50-60	7.2
50-60	60-70	3.0
60-70	70-80	2.1
70-80	80-90	1.4
TOTAL		100.0

Table 2.3.6-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Age Structure of Out-Migrants

Age in Year 2000	Age in Year 2010	Percentage (%)
	0-10	0.148
0-10	10-20	0.112
10-20	20-30	0.232
20-30	30-40	0.216
30-40	40-50	0.127
40-50	50-60	0.076
50-60	60-70	0.05
60-70	70-80	0.027
70-80	80-90	0.012
TOTAL		100

The number of in-migrants is determined primarily by the number of new dwelling units added to a TAZ each decade. The methodology for determining the number of new dwelling units in each TAZ for each projection period is covered in later (section 2.4.0). The number of dwelling units added in each TAZ is multiplied by the average household size of that TAZ. A small adjustment is made to allow some in-migration in all TAZs – even if they have no new dwelling units. This recognizes that as individuals die, their housing units may be occupied by new residents. The strength of this variable is determined by the number of women who start the year 2000 at ages 70 and older and do

not survive the decade to become ages 80 and older in 2010. The lack of survival of these older women, often widows, provides a good indicator of a change in dwelling unit occupancy. For rapidly growing suburban TAZs the impact of this variable is negligible. For older central city TAZs, however, it accounts for recently vacant dwelling units being reoccupied. The number of expected in-migrants is then portioned by age structure (as cited in Table 2.3.6-1) to determine how many migrants are at each age.

The age structure of the population also determines the amount of expected out-migration from each TAZ. In trying to predict the amount of out-migration in a TAZ, the number of people aged 10 to 18 in 2000, and hence 20 to 28 in 2010, is used as the major indicator. The number of individuals reaching this age indicates how many have reached a stage in the life cycle where they are more likely to move. Basic life cycle reasons include leaving home for employment reasons, leaving to go to school and departing to get married. A secondary indicator is the number of people aged 60 to 70 in 2000 who become 70 to 80 in 2010. This stage of the life cycle is associated with retirement. This does not mean that people of other ages are not also out-migrating, rather, this value is indicative of the expected volume. The number of expected out-migrants is then subdivided by the migration age structure listed in Table 2.3.6-2.

The process is repeated for the 2020 and 2030 projection periods.

2.3.7 Examples of Migration Component Applied to TAZs

Tables 2.3.7-1, 2.3.7-2, and 2.3.7-2 illustrates the number of in-migrants and out-migrants (and hence net-migrants) for several TAZs. As described above, the following formulas are utilized.

In-Migration = (# New DU) * (Average Household Size) + .2[(Females 70 plus in 2000)-(Females 80 plus in 2010)]

Out-Migration = .44(Population 10-18 in 2000[6]) + .14 (Population 60-70 in 2000)

The number of in-migrants is primarily based upon the expected number of new dwelling units. This number is multiplied by the average household size of that TAZ. A secondary component allows for in-migrants to replace some households which are empty due to mortality. Thus for TAZ 620, 20 new dwelling units are projected with an average household size of 2.944 (20 * 2.944=58.876). A very small number of elderly not surviving adds an additional .395 persons for a total in-migration number of 59.271. The out-migration estimate is 16.080. This creates a net in-migration of 43.191. The 59.271 in-migrants are distributed (according to the percentages in Table 2.3.6-1) by age and the out-migrants are distributed (according to the percentages in Table 2.3.6-2) by

[6] For 2020 and 2030 projections, population 10-20 is used as all populations are projected in ten year intervals. For all projections males and females are viewed separately, they are combined here to simplify the presentation.

age resulting in 8.64 net in-migrants at age 0-10 and 7.15 net in-migrants at age 10-20 in 2010 for TAZ 620 (see Table 2.3.7-3). The large number of new dwelling units in TAZ 615 results in dramatic in-migration. The relative lack of new construction and a population with numerous teenagers beginning to leave home, results in significant net out-migration in TAZ 627.

Table 2.3.7-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Number of In-migrants

A	B	C	D	E	F
TAZ	**New Dwelling Units 2000-10**	**Household Size**	**Dwelling Units x Household Size (B x C)**	**Elderly Survival**	**In-migrants (D + E)**
614	0	2.000	0.000	0.162	0.162
615	108	3.301	356.473	18.195	374.668
616	7	2.295	16.068	1.108	17.176
618	0	2.857	0.000	0.319	.319
620	20	2.944	58.876	0.395	59.271
627	3	2.970	8.911	3.788	12.699
642	0	2.655	0.000	0.795	0.795
649	16	2.370	37.926	0.714	38.640

Table 2.3.7-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Number of Out-migrants in 2000

TAZ	Males & Females Age 10-18	Males & Females Age 60-70	Formula Applied
614	0	0	0.000
615	98	37	48.300
616	20	10	10.200
618	14	10	7.560
620	34	8	16.080
627	319	119	157.020
642	20	12	10.480
649	7	7	4.060

Table 2.3.7-3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Age Distribution of Migrants -- Net Migration in Year 2010 by Age Groups

TAZ	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80+
614	0.03	0.02	0.03	0.03	0.03	0.01	0.00	0.00	0.00
615	62.54	51.17	64.10	49.51	55.69	23.31	8.83	6.56	4.67
616	1.69	1.45	1.09	0.55	1.54	0.46	0.01	0.09	0.12
618	-1.06	-0.80	-1.69	-1.58	-0.91	-0.55	-0.37	-0.20	-0.09
620	8.64	7.15	8.18	6.01	7.74	3.05	0.97	0.81	0.64
627	-20.88	-15.67	-33.88	-31.88	-17.85	-11.02	-7.47	-3.97	-1.71
642	-1.40	-1.05	-2.27	-2.14	-1.20	-0.74	-0.50	-0.27	-0.11
649	6.59	5.38	6.82	5.31	5.86	2.47	0.96	0.70	0.49

2.3.8 Combining Cohort Component Parts

Table 2.3.8-1 adds together the results of survival, fertility and migration. Thus for TAZ 620, the new age structure has 64.01 age 0-10 and 68.99 age 10-20 in 2010. Age 10-20 in 2010 is derived from 26.95 females and 34.89 males surviving (from age 0-10 in 2000) to 2010. Net in-migration is estimated at 7.15 for age 10-20 in 2010. This creates the total of 68.99 as shown in Table 2.3.8-1. Similar calculations are performed for all other age groups. Age 0-10 in 2010 has to be viewed separately, however, as all of these individuals were born after the year 2000. For TAZ 620 births from 2000 to 2010 are estimated to be 55.36. Net in-migration from 2000 to 2010 is estimated at 8.64. Total population age 0-10 in 2010 is thus estimated to be 64.01.

Table 2.3.8-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Survival, Fertility and Migration Combined in Year 2010 by Age Groups

TAZ	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80+	Total
614	0.03	0.02	0.03	0.03	0.03	0.01	0.00	0.00	1.52	1.68
615	273.84	280.58	188.08	197.99	157.78	98.97	77.30	35.17	59.18	1368.90
616	26.39	24.39	24.92	27.24	26.03	35.85	37.79	7.77	5.68	216.06
618	15.23	14.16	13.21	2.37	21.59	7.12	1.43	7.65	1.32	84.08
620	64.01	68.99	55.78	46.59	54.78	40.39	10.75	7.02	2.63	350.94
627	358.91	386.33	352.06	192.81	206.65	210.80	122.87	89.56	30.74	1950.73
642	27.08	28.87	23.51	16.66	17.44	13.56	12.08	9.05	4.53	152.78
649	11.47	14.36	15.73	11.25	15.68	11.02	5.47	6.10	4.38	95.45

Table 2.3.8-2 summarizes the new population totals for 2010, and compares the totals for 2000 and 2010. Totals have been converted to whole numbers. TAZ 614 begins with 4

very elderly people and reaches 2010 with 2. TAZ 615 with 108 new dwelling units has a dramatic population increase of 465 (in-migration of 375, out-migration of 48, 65 more births than deaths, and an adjustment of 73 due to the presence a large nursing home). TAZ 620 gains 89 individuals, 43 as a result of net in-migration and 46 from an excess of births over deaths. TAZ 627 has extensive net out-migration (144), but this is more than compensated for by a high fertility rate to result in a growth of 142.

Table 2.3.8-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Population totals 2000 and 2010

TAZ	Population 2000	Population 2010	Population Change Two Decimals	Population Change Integer
614	4	1.68	-2.32	-2
615	977	1441.90	464.90	465[7]
616	202	216.06	14.06	14
618	80	84.08	4.08	4
620	262	350.94	88.94	89
627	1809	1950.73	141.73	142
642	146	152.78	6.78	7
649	64	95.45	31.45	31

The cohort component method utilizing survival, birth and migration rates is done in an analogous manner for the 2020 and 2030 population projections.

2.4.0 NEW DWELLING UNITS 2000-2010

With data available for one-third of the projection period, differing procedures are employed for the 2000 to 2010 shorter term projection. Taking advantage of increased information will provide a sounder base population in 2010 upon which future projections rely.

2.4.1 Estimation of New Dwelling Units

Estimation of new dwelling units from 2000 to 2010 is done at the individual TAZ level. Rather than use percent change, absolute change in the number of dwelling units is utilized. The two major variables included are change in number of dwelling units from 1990 to 2000 and number of building permits 2000-2003.

New Dwelling Units 2000-2010 = (3 * (Building permits 2000-2003) + .66(Number of new dwelling units 1990-2000)) / 2

[7] 73 persons are also added to TAZ 615 as a result of its institutional population (nursing home).

The number of building permits is multiplied by three because there is data for approximately one-third of the projection period. The number of new dwelling units from 1990 to 2000 is multiplied by .66, as approximately two-thirds as many dwelling units are expected during 2000-2010 if one is to reach the control population total. The two values (building permits, 1990s growth) are weighted evenly and thus divided by two.

2.4.2 New Dwelling Unit Methodology Applied to TAZs

The following example includes selected TAZs from the Breaux Bridge area of St. Martin Parish. Adjustments to the calculated totals might be made for several reasons (discussed below). In this example, under transportation improvements (Transp.), is the widening and resurfacing of Rees Street in Breaux Bridge in 2003. Additionally, TAZ 615 was deemed a special case and the numbers do not precisely follow the formula. The reason for the change is that the building permits for a large development in this TAZ were just issued (late 2003) – whereas information of building permits for Lafayette Parish basically stops in April 2003. Thus the building permits really cover more than one-third of the decade. Furthermore, it is also doubtful this type of government housing will be repeated again this decade within this TAZ. Nonetheless, TAZ 615 is still expected to increase dramatically (from 296 to 404 dwelling units). The growth in TAZ 616 is reflective of the significant increase in dwelling units during the 1990s (18). The fact that it has no new building permits reduces the expected number of new dwelling units. TAZ 616 does receive a small boost related to transportation improvements. The growth in TAZ 649 reflects growth in the 1990s (11), along with a large number of recent building permits (8), to project an increase of 16 dwelling units.

Table 2.4.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Calculating New Dwelling Units 2000-2010

TAZ	1990 Dwelling Units	2000 Dwelling Units	2000-2003 Bldg Permits	Dwelling Unit 1990-2000	Expected Dwelling Units	Dwelling Units 2010	Adjust.	Final Dwelling Units 2010
TAZ 614	5	2	0	Decrease	0.00	0	Transp.	0
TAZ 615	255	296	76	41	127.53	98	Transp.	108
TAZ 616	70	88	0	18	5.94	6	Transp.	7
TAZ 618	30	28	0	Decrease	0.00	0		0
TAZ 620	37	89	2	52	20.16	20		20
TAZ 627	605	609	1	4	2.82	3		3
TAZ 642	59	55	0	Decrease	0.00	0		0
TAZ 649	16	27	8	11	15.63	16		16

2.4.3 Modifications to Dwelling Unit Calculations

For a variety of reasons, the number of new dwelling units expected according to the set formula was not appropriate for some TAZs. The projected number of new dwelling units was modified (and noted) for the following reasons:

1. Twenty TAZs have their number of dwelling units increased by 10 percent to represent the positive impact of several transportation improvements expected to have significant impacts during this decade. The impacts of I-49 extending south from I-10 are included in the later projections.
Ambassador Caffery Parkway South – Verot School Road to I-49
TAZs 277, 279, 278, 272, 271, 234, 236, 245, 241, 242 and 287
Louisiana Avenue and I-10 interchange
TAZs 82, 84, 415, 416, 216 and 218
Rees Street, Breaux Bridge
TAZs 615, 616 and 617

2.. Nine TAZs have reached urban densities (over 1.5 dwelling unit per acre) and space is no longer plentiful for large scale residential development to be repeated. TAZs 122, 160, 170, 174, 58, 178, 181, 295 and 324.

3. Thirty-seven TAZs have construction which is not likely to be repeated (particularly the construction of large multifamily units or the creation of mobile home parks). Some have also reached urban densities. TAZs 615, 646, 812, 177, 192, 196, 197, 203, 357, 358, 363, 364, 366, 437, 438, 326, 334, 335, 340, 346, 316, 220, 225, 229, 245, 140, 141, 146, 150, 153, 276, 277, 285, 154, 248, 249 and 270.

4. Several TAZs have their number of expected new dwelling units modified for other reasons. TAZ 155 along Camellia Boulevard lost 80 dwelling units from 1990 to 2000, but has had significant construction from 2000 to 2003 with 57 building permits, and therefore cannot fit reasonably into the formula. TAZs 907 and 920 in Vermilion Parish are along the Vermilion River and are expected to increase more rapidly due to that amenity. TAZs 68, 76 and 221 each have large numbers of lots ready for additional construction beyond the total suggested by the formula.

5. Institutional populations (jails, dormitories, nursing homes) are viewed separately from traditional dwelling units.

6. Several hundred housing units were demolished between 2000 and 2003. Those units have been subtracted from the dwelling unit total for 2010.

Dwelling unit totals are then checked to assure proper regional and directional allocations. Since exceptions have been made and the formula altered for a number of TAZs, one needs to make sure appropriate growth is seen in each direction. The study

area has been divided into thirty-one geographic subregions. Appropriate growth implies that the rate of change falls within the values created by either 1990-2000 growth or through building permit growth 2000-2003. For example, if the area south of the Vermilion River had 38% of the growth during the 1990s and 42% of the building permits from 2000-2003, then its projected growth from 2000 to 2010 should be between 38% and 42% of the total growth. These values were checked for five broad regions (north, south, east, west and what remains of the central part of Lafayette). Furthermore, checks were done for the thirty-one subregions. Adjustments were made in parts of St. Martin Parish. Building permit data is only available for the part of the parish within the city limits of Breaux Bridge. For the rest of the parish in the study area, information includes the number of new subdivisions (2000-2003) and the number of lots in each subdivision. This is augmented by driving and viewing recent residential construction throughout St. Martin Parish. Without complete building permit data, some of the values for TAZs (especially St. Martin Parish north of I-10 and in the far south part of the parish) are lower than expected and therefore the dwelling unit values are increased slightly to reflect an underestimation of building permits and provide a population total approximating the control total for the parish in 2010. Relatively high 2002 population estimates for St. Martin Parish by both the Census Bureau and the State of Louisiana provide further justification for this adjustment.

2.5.0 NEW DWELLING UNITS – 2020 and 2030

A different methodology is used to determine number of new dwelling units in the long range projections to 2020 and 2030. This is appropriate considering the long time frame and the reliability and accuracy of the data now being used. The goal is to provide a workable formula to calculate projected dwellings units to 2020 and 2030 which can be easily modified to incorporate new data. This task is difficult in that a variety of variables must be considered and is complicated by the fact that many of the relationships are not linear.

2.5.1 Recent Dwelling Unit Growth

Past residential construction remains a good indicator of future growth as long as a reasonable amount of land remains available for development. Therefore, an important variable is dwelling unit change by TAZ from 2000 to 2010 (and from 1990 to 2000). Examples of incorporating past growth are seen in Table 2.5.1. No growth in dwelling units is projected for TAZ 89 and TAZ 90, as no growth has occurred recently. For slow growing TAZs (an increase of ten dwelling units or less from 2000 to 2010), growth between 1990-2000 and 2000-2010 is averaged. A decline in dwelling units is treated as an increase of zero. TAZs 391 and 88 illustrate such areas. For those TAZs with moderate growth, the number of dwelling units from 2000 to 2010 is used, thus focusing on the most recent trend. TAZ 702 and TAZ 398 are examples in Table 2.5.1 Values for very rapidly growing TAZs must be adjusted as the percent of available land for development has decreased (TAZ 380 and TAZ 384). Values for all TAZs are still subject to all of the remaining variables.

Table 2.5.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Past Trends in Dwelling Unit Change to Determine 2020 Dwelling Units

Taz	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit/Acre	Percent Available Land	Dwelling Unit Change 1990-2000	Dwelling Unit Change 2000-2010	Dwelling Unit Change 2010-2020
TAZ 89	341	341	4.07	0%	-5	0	0
TAZ 90	92	91	2.36	0%	0	-1	0
TAZ 391	324	328	1.24	50%	3	4	3
TAZ 88	57	59	0.72	20%	6	2	4
TAZ 702	60	85	0.03	90%	26	25	25
TAZ 398	624	636	1.72	40%	21	12	12
TAZ 380	152	191	0.27	70%	55	39	47
TAZ 384	119	147	0.22	60%	44	28	22 [8]

2.5.2 Land Available for Residential Development

The percent of land available for residential development in each TAZ is an important variable. Estimates of available land are made for each decade. 2000 estimates are derived from aerial photographs and from personal observations. Land in residential, commercial, industrial, public, and transportation land uses is not deemed available. Estimates are then made for 2010 and 2020, incorporating the projected growth during the preceding decade. Percentages are approximate and estimated to the nearest ten percent.

To aid in deciding where growth is most likely to occur, a chart is constructed comparing the amount of growth which occurs with the percent of land available for development. Unfortunately, estimates of available land were not available for 1990 to allow a comparative analysis. When the amount of expected growth from 2000 to 2010 is compared with available land, the chart indicates that land with 70-80% availability is associated with the most rapid growth, with the numbers then decreasing with both higher and lower percentages of land available. The relationship is definitely not linear, and bears a stronger resemblance to an S-curve. Thus areas with 70% to 90% of their land available are deemed the most likely for development. These TAZs will have undergone significant residential development yet still have plentiful land available. Those areas with 30% to 70% of their land remaining are still likely candidates for residential development, but large scale subdivisions are not quite as likely. Those areas with under 30% remaining for development are likely to see lesser growth as land is filled in with individual residences on land that is probably more expensive than land in less developed areas. Areas with more than 90% of their land available are also likely to have very slow

[8] Totals are adjusted to reflect increased dwelling unit per acre density (see Sections 2.5.3) in this cell for TAZ 380 and the cell directly above for TAZ 384.

growth. All of the TAZs, regardless of their classification, remain subject to all the other variables which might encourage or discourage residential construction. The number of categories has been reduced and summarized for presentation in Table 2.5.2

Table 2.5.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Relationship Between Dwelling Unit Growth and Percent Land Available for TAZs

Percent Land Available	0	1 to 5	6 to 49	50+	Total
90%	11	28	13	2	**54**
80%	14	28	**63**	4	**109**
70%	6	13	**34**	**13**	**66**
60%	5	9	16	7	**37**
50%	5	8	6	3	**22**
40%	4	4	2	8	**18**
30%	6	6	7	3	**22**
20%	5	14	5	2	**26**
10%	6	11	6	1	**24**
0%	105	31	6	0	**142**
Total	**167**	**152**	**158**	**43**	**520**

2.5.3 Land Availability Formulas

TAZs which had rapid growth (more than 10 dwelling units) in a decade may have their classification of percent land available changed for the next projection decade. As the percent of available land changes, the likelihood of future development changes. It is assumed that density changes by approximately two dwelling units per acre when deciding whether to reclassify the amount of available land. Because of the non-linear nature of the relationship between land available and new dwelling units, a simple formula could not be derived. The guidelines in the discussion below are used when readjusting expected projection values.

Areas with little available land (20% and under) have their growth capped with a maximum allowed increase. This dramatically limits future growth in TAZs which experienced rapid growth, but have little space left for more. This handles the small number of TAZs which had a large multifamily unit built, but have little likelihood of another being built in the same TAZ. It recognizes that for TAZs with little or no available land, growth is likely to be slow, regardless of past growth. TAZ 177 in the Table 2.5.3 is a good example. Between 2000 and 2003 there was a 144 unit apartment complex built in TAZ 177.

Most of the expected growth for each decade is thus focused on those TAZs which have 60% to 90% of their land available for development, while also experiencing significant recent growth. In general, when less land is available for development, the probability of

development decreases. The one exception to this generalization is that as TAZs move from 80% to 70% of their land available, this seems to trigger the most rapid rates of growth seen in the study area. Thus when TAZs move from 80% to 70% of their land available, the number of expected new dwelling units rises.

The following descriptions use the 2010 to 2020 projection to illustrate the methodology. For the 2030 projection, simply add ten years to each of the years presented.

For all TAZs with an increase of 0 to 10 dwelling units in 2000-2010, average that value with the positive change in dwelling units 1990-2000. Maximum growth is 10 dwelling units.

For TAZs with an increase of more than 10 dwelling units in 2000-2010 – maintain that value unless increase mandates a decrease in available land for next decade.

If a decrease in land available category:

Change from 90% in 2000 to 80% or 70% in 2010 - maintain constant dwelling unit increase.

Change from 80% in 2000 to 70% in 2010 – increase dwelling units 20%

Change from 80% or 70% in 2000 to 60% in 2010 – decrease dwelling units 20%

Change from 60%, 50%, 40%, 30%, 20%, 10% in 2000 to ONE category lower in 2010 – decrease dwelling units 40%

Change from 60%, 50%, 40%, 30%, 20% in 2000 to TWO categories lower in 2010 – decrease dwelling units 80%

For TAZs with an increase of more than 10 dwelling units in 2000-2010 – but with 20% or less available land:

0% Available – maximum increase of 5

10% Available – maximum increase of 10

20% Available – maximum increase of 15

Of course, all TAZs are still subject to all the additional variables. Examples of most of the categories can be seen in Table 2.5.3. When viewing dwelling unit density it needs to be remembered than other land uses are considered when determining amount of available land. Thus TAZ 88 has a relatively low dwelling unit per acre value (.72) for having only 20% of its land remaining available. The majority of this TAZ is devoted to commercial and transportation functions.

Categories refer to the percent of available land remained. The TAZs with the most land remaining are Category 9 and have ninety percent of their land available, Category 5 would have fifty percent remaining, Category 1 would have ten percent, etc.

Table 2.5.3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Growth and Percent Land Available

Taz [9]	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit/Acre 2000	Dwelling Unit/Acre 2010	Dwelling Unit Change 2000-2010	Dwelling Unit Change 2010-2020	Percent Land Available 2000	Percent Land Available 2010	Growth Category (Percent)	Change
TAZ 90	92	91	2.36	2.36	-1	0	0%	0%	Same	No change
TAZ 88	57	59	0.70	0.72	2	4	20%	20%	Slow	Averg. 2 decades
TAZ 376	139	146	0.43	0.45	7	10	70%	70%	Slow	Averg. 2 decades
TAZ 381	89	115	0.30	0.39	26	31	80%	70%	80- 70	Increase 20%
TAZ 279	226	280	0.56	0.70	55	44	70%	60%	70- 60	Decrease 20%
TAZ 249	229	312	0.34	0.46	83	50	40%	30%	40- 30	Decrease 40%
TAZ 150	399	647	1.32	2.13	248	50	40%	20%	40- 20.	Decrease 80%
TAZ 143	883	902	8.92	9.10	17	15	20%	20%	20%	Max 15
TAZ 276	385	401	2.17	2.26	16	10	10%	10%	10%	Max 15
TAZ 160	913	928	2.15	2.19	15	5	0%	0%	0%	Max 5
TAZ 177	79	223	0.94	2.66	144	10	10%	10%	10%	Max 10

2.5.4 Proximity to Growth Areas

Growth is deemed more likely when a TAZ is in close proximity to rapidly growing TAZs. Remote areas away from fast growing TAZs are considered less likely candidates for residential growth. Core areas of the most rapid growth from 2000-2010 are identified. Secondary cores of moderately rapid growth are also identified. The most rapidly growing TAZs, with an increase of 50 or more dwelling units are each looked at individually. In most instances, substantial new growth is already projected for these TAZs. Adjacent TAZs are likely locations for the spreading of growth. Those TAZs surrounded by the most rapidly growing TAZs receive a Category 4 or 40 % increase from the base dwelling unit projection. TAZs bordering rapidly growing areas and secondary cores receive a Category 3 (30% increase) or Category 2 (20% increase) classification. TAZs adjacent to secondary cores receive a Category 1 or 10% increase.

[9] All TAZs also subject to adjustment by additional variables.

There are 30 TAZs in approximately nine cores. Several of the TAZs with very rapid growth are not designated cores, due to the one-time nature of their growth (such as TAZ 177 and its new apartment complex) or because of a lack of space for expansion (such as TAZ 76 bordering Interstate 10). Approximately 83 TAZs increased by more than 20 dwelling units from 2000 to 2010 and are part of secondary cores. Over 100 additional TAZs border the cores and secondary cores. Areas of extensive wetlands are excluded, even when adjacent to rapidly growing areas. For the most part, wetland areas (such as the Lake Martin region of western St. Martin Parish) have had very little growth in past decades and with this methodology generate very little future growth.

For the year 2020, adequate land for expected growth is found within current rapid growth cores and within the TAZs in their immediate proximity. For the year 2030, proximity influence is slightly expanded by having the minimum number of dwelling units added for each category increased. If a TAZ has at least 20 dwelling units, a minimum of one dwelling unit was added for Category 1 in the 2020 projection. This value is increased to three dwelling units for the 2030 projection. Analogously, Category 2 has its minimum increased from two to six dwelling units. Category 3 goes from three to nine dwelling units, and Category 4 from four to twelve dwelling units. For 2030, this recognizes that growth is likely to occur in TAZs adjacent to rapidly growing areas, even if very little growth has occurred there in the past.

2.5.5 Examples of Proximity Variable Applied to TAZs

The following examples are taken from the Coteau area in the southeast part of the study region. TAZs 857, 860, 850, 858 and 856 form a secondary core. In this example, very little growth is occurring in areas outside the secondary core, and the proximity influence is limited. For the 2020 projection, TAZ 857 is designated a Category 3. The base increase for TAZ 857 is 29. The proximity factor is thirty percent of 29 or three, whichever is greater. Thirty percent of 29 (8.7) is greater than three, so nine dwelling units are added. For the 2030 projection, TAZ 857 is a Category 2 and the base increase is only nine dwelling units. Twenty percent of nine (1.8) is less than the minimum of six, so six dwelling units are added. For the 2020 projection TAZ 858 is designated a Category 2. The base increase for TAZ 858 is six dwelling units. The proximity factor is twenty percent of 6 or two, whichever is greater. Twenty percent of six (1.2) is less than two, so two dwelling units are added. For the 2030 projection, the absolute numbers increase. TAZ 858 is again a Category 2, with an absolute proximity increase of six dwelling units. TAZ 253 has less than twenty dwelling units (two dwelling units), and thus is not considered for the proximity factor.

Table 2.5.5-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Proximity Factor – 2010 to 2020 Projection

TAZ	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit Change 2000-2010	Dwelling Unit Change 2010-2020	Proximity Cat - Percent	New Dwelling Unit Added
TAZ 857	122	170	48	29	3	9
TAZ 850	97	122	25	15	3	4
TAZ 856	168	197	29	17	3	5
TAZ 860	83	131	48	58	2	12
TAZ 851	19	23	4	4	1	1
TAZ 855	26	28	2	1	1	1
TAZ 858	68	74	6	6	2	2
TAZ 864	124	131	7	3	1	1
TAZ 859	37	42	5	5	1	1
TAZ 861	60	77	17	10	1	1
TAZ 253	2	2	0	0	2	0
TAZ 256	83	83	0	0	2	2
TAZ 700	25	28	3	3	3	3

Table 2.5.5-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Proximity Factor – 2020 to 2030 Projection

TAZ	Dwelling Unit 2010	Dwelling Unit 2020	Dwelling Unit Change 2010-2020	Dwelling Unit Change 2020-2030	Proximity Cat - %	New Dwelling Unit Added
TAZ 857	170	211	44	9	2	6
TAZ 850	122	146	24	14	2	6
TAZ 856	197	220	25	15	2	6
TAZ 860	131	213	82	56	2	11
TAZ 851	23	29	6	5	1	3
TAZ 855	28	30	2	2	1	3
TAZ 858	74	83	9	7	2	6
TAZ 864	131	135	4	5	1	3
TAZ 859	42	48	6	5	1	3
TAZ 861	77	91	14	8	1	3
TAZ 253	2	2	0	0	1	0
TAZ 256	83	85	2	1	2	6
TAZ 700	28	34	6	4	2	6

2.5.6 Transportation Variable

Transportation improvements will likely have their greatest impacts upon commercial land uses, but are considered to have some affect upon residential development. Most long range transportation improvements are not included in this analysis, as part of the reason for this study is to determine appropriate priorities for 2030 – to determine if the present planned improvements are occurring where they will be needed the most. Several transportation projects are, however, considered as relevant for the 2020 and 2030 projections. Ambassador Caffery Parkway South from Verot School Road to Interstate 49 should be completed by 2010, but its impacts are expected well into the next decade. The building of Interstate 49 from Interstate 10 to the southern edge of the study area is expected to be completed by 2020, with impacts lasting into the next decade. Additional frontage roads along Interstate 10 in St. Martin Parish are also anticipated by 2020. These transportation improvements should affect not only the TAZs through which they pass, but also nearby TAZs, though with decreasing influence as one moves away from the transportation line. These three transportation projects are seen as impacting seventy-eight TAZs.

Impacts of the transportation improvements are rated on a scale from 1 to 4, with 4 represents the greatest impact. Those TAZs designated Category 4, have their base number of dwelling units (before any other modifications for proximity, multifamily dwellings, etc.) increased by forty percent. Those designated Category 3 have their based number of dwelling units increased by thirty percent, etc. TAZs with no dwelling units have no dwelling units added. These TAZs are primarily commercial and industrial in function.

The construction of I-49 is expected to dramatically impact several central city TAZs. Based on current information, the loss of 105 dwelling units is projected between 2010 and 2020. Between 2020 and 2030, 115 dwelling units are added representing expected new redevelopment in this region.

Table 2.5.6
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZs Impacted by I-49 Construction in Central Lafayette

Taz	Dwelling Unit Loss 2010-2020	Dwelling Unit Gain 2020-2030
100	10	10
101	5	10
102	5	0
104	5	25
105	5	25
106	20	0
107	20	25
108	20	20
117	15	0
Total	105	115

2.5.7 Examples of Transportation Variable Applied to TAZs

The following example illustrates the transportation impact included along a new portion of Interstate 49 south of Lafayette for the 2020 projection (see Table 2.5.7). The development of I-49 continues to have a similar impact in the 2030 projection.

Table 2.5.7
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Transportation Factor

Taz	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit Change 2000-2010	Dwelling Unit Change 2010-2020	Added Dwelling Unite To Transportation	Category - Percentage
TAZ 695	90	110	20	20	6	Cat 3-30%
TAZ 694	87	107	20	16	3	Cat 2-20%
TAZ 687	127	158	31	25	3	Cat 1-10%
TAZ 240	0	0	0	0	0	Cat 3-30%

2.5.8 Large Tracts of Developable Land

Several large pieces of property (often under single ownership) have been identified as the more likely candidates for extensive subdivision creation. Some TAZs have had more land recently subdivided into lots (2000-2003) than is likely to be used by 2010. Both of these conditions combine to produce a factor encouraging more residential development. Two examples are listed below. In TAZ 299 a large piece of undeveloped land exists. During 2003 a modest portion of that land was subdivided into lots, but no

building permits issued as of the date of data collection for this study. In TAZ 91 large pieces of undeveloped land remain. In late 2003 a portion was subdivided with the intention of developing a mobile home park. Some development for both TAZs is assumed for 2000-2010, but additional potential is deemed likely for 2010 to 2020. By including this variable in the 2020 projection, it provides input into the 2030 projection to continue the impact without adding in this variable again in the later projection.

Table 2.5.8
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Large Land Parcel Factor

Taz	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit Change 2000-2010	Dwelling Unit Change 2010-2020	Add Dwelling Unit To Large Land Parcel
TAZ 299	401	428	27	16	120
TAZ 91	449	478	29	22	90

2.5.9 Multifamily Dwelling Units

Since future growth is based on past growth, for many TAZs the building of some multifamily dwellings is already assumed. Additional large apartment complexes are likely, however, and expected to follow current patterns and locate adjacent to major transportation arteries. They are expected to be built further out along existing arterials (such as Johnston Street), to fill in available land on others (such as Kaliste Saloom) and to be seen along new arteries (such as Ambassador Caffery Parkway South). Exact locations cannot be predicted with any confidence, so general areas comprised of several TAZs are chosen as the most likely candidates. The dwelling unit and population growth associated with the multifamily dwelling(s) is then divided amongst those geographically adjacent TAZs. Additional multifamily units are assumed in the following nine areas comprised of 27 TAZs:

Johnston Street west, Kaliste Saloom, Kaliste Saloom west, Ambassador Caffery Parkway South –east, Ambassador Caffery South west, Congress Street west, Louisiana Avenue north, Breaux Bridge-Rees Street, and Youngsville north.

For 2030, additional multifamily units are assumed further west along Johnston Street to the Vermilion Parish border (TAZs 303, 304 and 305) and along Ambassador Caffery Parkway. Table 2.5.8 illustrates the addition of multifamily dwellings units spread amongst four TAZs along Johnston Street for the 2020 projection.

Table 2.5.9
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Multifamily Factor

TAZ	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit Change 2000-2010	Dwelling Unit Change 2010-2020	Add Multi- Family Dwelling Unit
TAZ 299	401	428	27	16	20
TAZ 302	333	424	91	73	20
TAZ 313[10]	248	342	94	75	10
TAZ 314	134	155	21	25	20

2.6.0 FORMULAS FOR 2020 and 2030 PROJECTIONS

Developing formulas for calculating the expected number of new dwelling units and new population totals in 2020 and 2030 is essential for revision purposes. The projections do not utilize one simple formula applied uniformly to all TAZs. Rather, TAZs are divided into functional groups based upon their growth pattern and amount of available land to develop (from aerial photographs, personal observation, and dwelling unit per acre calculations). This is done for the year 2010, reflecting the growth which took place during the previous decade. The process is repeated in 2020 to reflect growth in the previous decade and use as the basic input into the 2030 projection. In general, formulas are given for the 2020 projections – but can be easily altered to be appropriate for the 2030 projection.

2.6.1 Calculating Base Number of Dwelling Units

First calculated is the base number of new dwelling units expected between 2010 and 2020 (BaseDU2020). For TAZs this can be calculated by multiplying the increase in dwelling units from 2000 to 2010 (ChDU) by a GD (Growth-Development) factor. TAZs are grouped into seven Types (A to G). Changing categories refers to the ten density groupings of available land (see Section 5.3).

For Type A TAZs GD=1
For Type B TAZs GD=1
For Type C TAZs GD varies based on available land
For Type D TAZs GD=.2
For Type E TAZs GD=.6
For Type F TAZs GD=.8
For Type G TAZs GD=1.2

[10] Some multifamily unit growth already assumed.

Type A. Areas which had no growth are assigned one group. No significant residential development is expected in these 115 TAZs, and none is projected. BaseDU2020 = 1ChDU.

Type B. Areas which had slower growth (1 to 10 dwelling units 2000-2010) are grouped together. Slower growth is expected in these TAZs. Maximum growth will be 10 dwelling units. A few of these TAZs will change categories and have higher growth during the next decade (due to effects of transportation improvements, proximity to high growth cores, expected multifamily development, or the presence of large tracts of developable land). BaseDU2020 = 1(ChDU). For all Type B TAZs this value will be between 1 and 10.

Type C: For TAZs with 20% or less available land, a maximum growth of 15 dwelling units for the 20% category is set, 10 dwelling units for the 10% category, and 5 dwelling units for the 0% category. BaseDU2020 = ChDU, however, if a Category 2 TAZ, then a maximum limit of 15, if a Category 1 TAZ, then a maximum limit of 10, if a Category 0 TAZ, then a maximum limit of 5. [For updating purposes can use BasewDU2020=.1(ChDU)]

Type D: For TAZs with 60% available land or less, dropping down two categories. These TAZs are expected to grow at a dramatically slower rate, 80% slower. NewDU2020=.2(ChDU).

Type E: For TAZs with 60% available land or less dropping, down one category. These TAZs are expected to grow at a slower rate, 40% slower. NewDU2020=.6(ChDU).

Type F: For TAZs going from 70% available land to 60% available land. These TAZs are expected to grow at a slightly slower rate, 20% slower than the previous decade. NewDU2020=.8(ChDU).

Type G: For TAZs which had significant growth (more than 10 dwelling units 2000-2010), but did not change available land categories. NewDU2020=1(ChDU)

Type H: For TAZs going from 80% available land to 70% available land. These TAZs are expected to grow at an increasing rate, 20% faster than the previous decade. NewDU2020=1.2(ChDU).

2.6.2 Adjustments to Base Dwelling Units

Proximity. A proximity factor (PX) is multiplied times the base dwelling unit change value. The proximity factors range from .1 to .4. Proximity values can easily be altered to reflect new perceptions. If those areas currently growing very rapidly become fully developed, proximity values might need to be increased. If grow begins to spread out and sprawl throughout the region – proximity influence might extend further outward

from core areas. With enough time and resources a proximity factor could in the future be mathematically derived.

NewDU2020 = (BaseDU2020)*(PX)

Transportation. A transportation improvement factor (TR) is multiplied times the base dwelling unit change value. These factors range from .1 to .4. Such transportation values can be altered to reflect new transportation improvements. The impact of the transportation changes can vary by specific projects. Factor values can be increased or decreased.

NewDU2020 = (BaseDU2020)*(TR)

Large Lot Availability. The availability of large parcels of land (LP) certainly provides a greater opportunity for large scale residential developments. Knowledge of such locations can be factored in to enhance the probability of growth in those TAZs.

NewDU2020 = (BaseDU2020) + (LP)

Multifamily Dwelling. Development of multifamily dwellings (MD) is already built into many TAZs as a result of the base formula. Likely areas of additional multifamily construction can be identified. These values can also be altered when exact locations of such construction become known.

NewDU2020 = (BaseDU2020) + (MD)

2.6.3 Combining Dwelling Unit All Factors

The total number of new dwelling units in a TAZ is determined by first calculating the base number of dwelling units. Change in the number of dwelling units (ChDU) over the last decade is multiplied by a Growth Development factor (GD). Each TAZ has been assigned a Growth Development factor (based on its type - from Type A to Type G).

BaseDU2020 = (GD)(ChDU)

The base number of dwelling units is then used to calculate additional growth due to proximity and transportation. Additional dwelling units from large parcels and multifamily dwelling are then added. The base number of dwelling units plus these four variables creates the total number of new dwelling units expected.

NewDU2020 = (BaseDU2020) + (BaseDU2020)*(PX) + (BaseDU2020)*(TR) + (LP) + (MD)

Most elements of the above formula can be easily altered to reflect new conditions. Some of the TAZs previously used as examples are presented in Table 2.6.3-1.The values are then put into the appropriate formulas in Table 2.6.3-2.

Table 2.6.3-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Projection – All Factors

TAZ	Dwelling Unit 2000	Dwelling Unit 2010	Dwelling Unit Change 2000-2010	Base Dwelling Unit Growth 2010-2020	Proximity (PX)	Transp. (TR)	Large Parcel (LP)	Multifam (MD)	Total Dwelling Unit Change 2010-2020
240	0	0	0	0	0	0	0	0	0
90	92	91	-1	0	0	0	0	0	0
91	449	482	37	22	0	0	70	20	112
381	89	115	26	31	3	0	0	0	34
150	399	647	248	50	0	0	0	10	60
177	79	223	144	10	0	0	0	0	10
299	401	428	27	16	6	0	120	20	162
695	90	110	20	20	2	6	0	0	28
857	122	170	48	29	9	6	0	0	44
858	68	74	6	6	2	1	0	0	9
687	127	158	31	25	5	3	0	0	33
279	226	281	55	44	17	17	0	10	88

Table 2.6.3-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Dwelling Unit Projection By Formula

TAZ	Type	Formula [11]	Sum
240	A	= 0 + 0 + 0 + 0 + 0	0
90	A	= 0 + 0 + 0 + 0 + 0	0
91	E	= (.6)(37) + 0 + 0 + 70 + 20	112
381	H	= (1.2)(26) + (.1)(31) + 0 + 0 + 0	34
150	D	= (.2)(248) + 0 +0 + 0 + 10	60
177	C	= 10(Max) + 0 + 0 + 0 + 0	10
299	E	= (.6)(27) + (.4)(16) + 0 + 120 +20	162
695	G	= (1)(20) + (.1)(20) + (.3)(20) + 0 + 0	28
857	E	= (.6)(48) + (.3)(29) + (.2)(29) + 0 + 0	44
858	B	= (1)(6) + (.3)(6) + (.1)(6) + 0 + 0	9
687	F	= (.8)(31) + (.2)(25) + (.1)(25) + 0 + 0	33
279	F	= (.8)(55) + (.4)(44) + (.4)(44) + 0 + 10	88

[11] BaseDU2020 = (GD)(ChDU)
NewDU2020 = (BaseDU2020) + (BaseDU2020)(PX) + (BaseDU2020)(TR) + (LP) + (MD)

2.6.4 Converting Dwelling Units to Population

The number of projected dwelling units needs to be converted to a projected population in each TAZ for each projection decade. The procedure involves incorporating the number of new dwelling units into the cohort component methodology (see Section 3). For simplified updating, however, the results of the cohort component procedure are reduced to several numeric factors which can be applied to each TAZ. This simplified methodology does sacrifice some accuracy, and would not be used as a primary method, but it does allow for much easier updates.

For 2020 and 2030 a major goal is to develop formulas which can be easily altered as assumptions change and new information becomes available. From the cohort component analysis, TAZs are grouped together based on the expected impact of births, deaths and out-migration for the projection period. This classification is a result of viewing the results of the cohort component method before any addition of new dwelling units takes place. TAZs are grouped into six categories. Category A represents those TAZs which are growing rapidly from natural increase. Such TAZs with high birth rates are found in the older parts of Lafayette or Breaux Bridge. Such TAZs might also be found in some suburban areas where the majority of the population is in childbearing years. Category A TAZs have their starting population multiplied by a factor of 1.06 to determine the population at the end of the decade. Category F represents those TAZs where the population is slowly declining due to natural decrease. Some of these TAZs are located in the central city, others in rural areas. They all have older populations which are experiencing very little childbearing. Category F TAZs have their starting population multiplied by a factor of .96 to determine the population at the end of the decade.

Group A – factor of 1.06
Group B – factor of 1.04
Group C – factor of 1.02
Group D – factor of 1.00
Group E – factor of .98
Group F – factor of .96

When combined with average household size, the use of the above factors bypasses the long and complicated cohort component process, yet its numbers are still based upon that cohort component methodology. Examples of this procedure applied to several TAZs are presented in Tables 2.6.4-1 and 2.6.4-2.

CohCom represents the cohort component factor and summarizes the affect of survival, fertility and out-migration. TAZs are categorized into six different groups with impacts ranging from an increase of six percent to a decrease of four percent (1.06 to .96).

POP2020 = (CohCom)POP2010 + (HouseholdSize2010)NewDU2020

Table 2.6.4-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Converting Dwelling Units to Population

TAZ	Pop. 2010	Cohort Component Category	Cohort Component Factor	Population 2010 x Cohort Component	New Dwelling Units 2010-20	Household Size	New Dwelling Units x Household Size	Population 2020	Population Change 2010-20
240	0	D	1.00	0	0	0	0	0	0
90	238	D	1.00	238	0	2.61	0	238	0
91	1171	C	1.02	1194.4	136	2.45	333.2	1527.6	356.6
381	366	A	1.06	387.96	34	3.18	108.12	496.08	130.08
150	1303	E	0.98	1276.94	60	2.01	120.6	1397.54	94.54
177	535	E	0.98	524.30	10	2.4	24	548.30	13.30
299	1348	B	1.04	1401.92	162	3.15	510.3	1912.22	564.22
695	279	E	0.98	273.42	28	2.58	72.24	345.66	66.66
857	566	B	1.04	588.64	44	3.33	146.52	735.16	169.16
858	201	D	1.00	201	9	2.71	24.39	225.39	24.39
687	454	A	1.06	481.24	33	2.85	94.05	575.29	121.29
279	706	C	1.02	720.12	88	2.52	221.76	941.88	235.88

Table 2.6.4-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Converting Dwelling Units to Population by Formula

TAZ	Formula [12]	Sum
240	= (1)(0) + (0)(0)	0
90	= (1)(238) + (2.61)(0)	238
91	= (1.02)(1171) + (2.45)(136)	1528
381	= (1.06)(366) + (3.18)(34)	496
150	= (.98)(1303) + (2.01)(60)	1398
177	= (.98)(535) + (2.40)(10)	548
299	= (1.04)(1348) + (3.15)(162)	1912
695	= (.98)(279) + (2.58)(28)	346
857	= (1.04)(566) + (3.33)(44)	735
858	= (1)(201) + (2.71)(9)	225
687	= (1.06)(454) + (2.85)(33)	575
279	= (1.02)(706) + (2.52)(88)	942

[12] POP2020= (CohCom)POP2010 + (HouseholdSize2010)NewDU2020

2.6.5 Evaluating Shortcut Conversion

The methodology for bypassing the lengthy cohort component procedure is useful for updating TAZs. The values generated differ from the actual values done in this report utilizing the full cohort component procedure. However, the ability to easily update the projections when new information becomes available outweighs any potential problems. The shortcut procedure should only be used to assess the general impact of major discrepancies in actual and projected data.

Table 2.6.5 compares the values generated using the shortcut method with the actual values generated in the 2020 projection found in this report. Most of the values were within one or two percent of the actual totals.

Table 2.6.5
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Comparing Shortcut Formula Method with Actual Projection – 2020

TAZ	Pop. 2010	Pop. 2020 Shortcut	Pop. 2020 Actual Projection
240	0	0	0
90	238	238	235
91	1170	1528	1515
381	366	496	496
150	1301	1398	1395
177	534	548	565
299	1348	1912	1933
695	278	346	349
857	566	735	748
858	201	225	217
687	454	575	574
279	706	942	920

2.7.0 REVISING PROJECTIONS

Projections for 2020 and 2030 can be easily revised when new information becomes available. Two examples are provided to illustrate the process.

2.7.1 Example One – Updating the 2020 projection based on the 2010 Census

After the 2010 census it was found that TAZ 858 grew dramatically faster than projected. It was projected to increase from 68 dwelling units in 2000 to 74 dwelling units in 2010 (plus 6). Instead TAZ 858 had 94 dwelling units in 2010 (plus 26). The population was expected to increase from 186 in 2000 to 201 in 2010 (plus 15). Instead, TAZ 858 had a population of 268 in 2010 (plus 82). The 2020 projection now needs to be updated based

upon the information available from the 2010 census. For 2020, TAZ 858 had a projected increase of 9 dwelling units (from 74 to 83) and 17 people (from 201 to 218).

Original Dwelling Unit Projection for 2020:
BaseDU2020 = (GD)(ChDU)
NewDU2020 = (BaseDU2020) + (PX)(BaseDU2020) + (TR)(BaseDU2020) + (LP) + (MD)

TAZ 858 Type B NewDU2020 = (1)(6) + (.3)(6) + (.1)(6) + 0 + 0 = 9

Revised Dwelling Unit Projection for 2020:

TAZ 858 changed from Type B to Type E as the percent of land available drops from 60% to 50%. With the slow growth in the original projection, the TAZ did not change categories. TAZ 858 grew by 26 dwelling units (ChDU) from 2000 to 2010, not the original projection of 6. The proximity factor remains at .3. The transportation factor is raised from .1 to .2 as the TAZ is deemed to have had significant impact from I-49.

RevisedNewDU2020 = (.6)(26) + (.2)(16) + (.1)(16) + 0 + 0 = 21
This provides an increase of 21 dwelling units to a 2020 total of 115.

Original Population Projection for 2020:

TAZ 858 POP2020 = 218

Revised Population Projection for 2020:

POP2020= (CohCom)POP2010 + (HouseholdSize2010)NewDU2020

RevisedPOP2020 = (1.0)(268) + (2.74)(20) = 323

Original 2010 Projection	74 DU	+6 DU	201 Pop	+15 Pop.
2010 Census	94 DU	+26 DU	268 Pop	+82 Pop.
Original 2020 Projection	83 DU	+9 DU	218 Pop	+17 Pop.
Revised 2020 Projection:	115 DU	+21 DU	323 Pop	+55 Pop.

Other possible revisions for TAZ 858 might include a change in household size with greater growth from 2000 to 2010. The 2030 projection would then need to be revised.

2.7.2 Example Two – Updating the 2010 and 2020 Projections Based on Rapid Growth in 2006

In 2006 it became apparent that growth in TAZ 91 was dramatically greater than projected. The mobile home park with 240 lots which was only on the drawing board in

2003, was completed and fully occupied by 2006. Thus the 2010 projection needs to be immediately updated and the 2020 projection revised. By 2006 TAZ 91 has already had an increase in 265 dwelling units, with a total of 280 new dwelling units expected by the end of the decade. Thus instead of adding 29 dwelling units as originally projected, one now has the addition of 280 dwelling units.

2000 Census	449 DU	1078 Pop
Original 2010 Projection	478 DU	1171 Pop

Instead of working through the complex cohort component methodology, the simplified method used for the long range projections can be employed. While the formula was designed for the 2020 and 2030 projections, it can also be used to revise the 2010 projections. The cohort component factor for TAZ 91 is Category C (1.02).
POP2010 = (CohCom)POP2000 + (HouseholdSize2000)NewDU2010

RevisedPOP2010 = (1.02)(1078) + (2.40)(280) = 1772

The 2020 projection for TAZ 91 also needs revision. We now have a much larger base population. TAZ 91 drops two categories instead of one in terms of land available (from 60% to 40%, and thus that factor changes as it moves to Type D). The proximity factor has been decreased from .2 to .1. The large land parcel factor is eliminated (used for the mobile home park). The TAZ is still deemed likely for multifamily dwellings construction.

Original 2020 DU Projection:

BaseDU2020 = (GD)(ChDU)
NewDU2020 = (BaseDU2020) + (PX)(BaseDU2020) + (TR)(BaseDU2020) + (LP) + (MD)

TAZ 91 Type E NewDU2020 = (.6)(29) + (.2)(22) + 0 + 90 + 20 = 136

Revised 2020 DU Projection:
TAZ 91 Type D NewDU2020 = (.2)(280) + (.1)(56) + 0 + 0 + 20 = 82

Original 2020 Pop Projection:

POP2020 = POP2010 + (CohCom)POP2010 + (HouseholdSize2010)NewDU2020

TAZ 91 = 1515

Revised 2020 Pop Projection:
TAZ 91 POP2020 = (1.02)(1772) + (2.4)(82) = 2001

Original 2010 Projection	478 DU	+29 DU	1171 Pop.	+93 Pop.

Revised 2010 Projection	729 DU	+280 DU	1772 Pop.	+694 Pop.
Original 2020 Projection	614 DU	+136 DU	1516 Pop.	+345 Pop.
Revised 2020 Projection	811 DU	+82 DU	2001 Pop.	+229 Pop.

The changes made in TAZ 91 actually reduced the number of new dwelling units expected from 2010 to 2020 from 136 to 82. A large parcel of land was used up and the total amount of available land in the TAZ decreased substantially. Population growth from 2010 to 2020 was changed from 345 down to 229. The growth had occurred earlier than had been projected. Adjustment to household size could also be made for the 2020 projection if that changed significantly with the addition of the large mobile home park. The 2030 projection would then also need to be revised.

2.8.0 OCCUPIED AND VACANT DWELLING UNITS

A final step is the designation of dwelling units as occupied or vacant. With a significant increase in dwelling unit growth as compared with past decades, it is assumed that the vacancy rate will decline by approximately one-fourth from 2000 to 2010. Thus the occupancy rate is expected to increase from approximately 92.5 percent in 2000 to 95.4 percent in 2010 and remain at that level for subsequent projections.

Table 2.8.0
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Occupied and Vacant Dwelling Units

TAZ	Occupancy Rate 2000	Occupancy Rate 2010	Dwelling Unit 2010	Occupied Units	Vacant Units
TAZ 240 [13]	0.000	0.000	0	0	0
TAZ 90	0.978	0.984	91	90	1
TAZ 91	0.884	0.913	482	436	46
TAZ 381	0.921	0.941	115	108	7
TAZ 150	0.935	0.951	647	615	32
TAZ 177	1.000	1.000	223	223	0
TAZ 299	0.978	0.983	428	421	7
TAZ 695	0.956	0.967	110	106	4
TAZ 857	0.992	0.994	170	169	1
TAZ 858	0.956	0.967	74	72	2
TAZ 687	0.929	0.947	158	150	8
TAZ 279	0.947	0.96	281	270	11

[13] No dwelling units are in TAZ 240.

2.9.0 METHODOLOGY SUMMARY

Population projections are difficult as it is impossible to predict the future. A great deal of time and effort was exerted to provide an accurate picture of the study region in 2003. It is hoped that this effort results in greater accuracy for the 2010 projection of dwelling units and population. The 2010 projections utilize a complex cohort component methodology. It was necessary to complete that process in order to gain appropriate numbers for shortcuts available for use in revisions.

Formulas for both dwelling units and population have been derived. These formulas can be used to update TAZ information at any time. The formulas do include shortcuts, however, and updates before 2010 are recommended only when significant changes in a TAZ become obvious. The formulas are not designed to incorporate small changes (e.g., eight dwelling units instead of five). The formulas provide good new estimates when the projection numbers are grossly incorrect. The formulas are specifically designed to allow complete updating after a new census. The following formulas summarize the procedure for updating the 2010 to 2020 projection (refer to earlier discussions for definition of terms).

BaseDU2020 = (GD)(ChDU)
NewDU2020 = (BaseDU2020) + (BaseDU2020)(PX) + (BaseDU2020)(TR) + (LP) + (MD)

POP2020 = (CohCom)POP2010 + (HouseholdSize2010)NewDU2020

As time and resources become available, the formulas can be expanded to add more variables. The existing variables can be more mathematically derived. TAZs can be moved to different types and categories as they become developed. Numerical values of the factors can be adjusted.

An interpretation of results and an analysis and discussion of patterns are found in Chapter 1. While all calculations are specific to individual TAZs, the TAZs are grouped together in a functional classification based upon expected growth patterns from 2000 to 2030 to aid in interpretation of the findings.

The intention of this chapter is to explain the methodology used to project dwelling units and population to the years 2010, 2020, and 2030. Examples are presented with the goal of explaining a somewhat complex procedure in terms that someone without expertise in demography can understand.

3.0 EMPLOYMENT AND SCHOOL ATTENDANCE METHOD

3.1.0 INTRODUCTION

The Lafayette region is projected to have moderate continuous population growth over the next thirty years. Overall employment is expected to grow at a slightly faster rate than the population, as the Lafayette region serves as a regional center for many employment sectors. The City of Lafayette is a retail hub for all of Acadiana. The same is true for many areas of finance, transportation and medical services.

Employment is projected separately for three distinct employment sectors, using different methodologies for each. Retail employment growth is directly retailed to population growth. Regions of greatest population growth can expect significant employment growth. It is assumed, however, that retail employment in all parts of the study area will grow at least modestly, even with very little or no population growth in the immediate area. All parts of the study area should benefit from the overall population growth. Non-retail employment does not directly depend on the population growth in the immediate area, and thus is more tied to the overall growth of the region. School attendance is driven solely by the population projections. The school attendance numbers then directly lead to employment projections in education.

3.1.1 Data Sets

The data provided are excellent. Employment summaries by industry category and location rarely have the detailed precision of the report provided by the Metropolitan Planning Organization. The fact that the information represents an approximate seventy-five percent sample extrapolated to one hundred percent does, however, present some difficulties. Actual employment values for particular TAZs have been multiplied by approximately 1.3 to handle the sample size. While this makes good statistical sense, it can lead to a few inappropriate numbers at the individual TAZ level (such as employment at the University of Louisiana at Lafayette where actual number of employees is multiplied by 1.3). It is, however, assumed that this is a sound methodology and therefore it has not been altered.

Within the 2000 base data set, a small number of businesses where reassigned to different TAZs. This was done based upon personal observation and utilization of the addresses provided within the data set. Employment totals for 2000 were increased by 15 employees. 85 were added in TAZ 916 for North Vermilion High School (which had been omitted), and 70 were removed from TAZ 804 as Mire Elementary School was listed twice. The number of total employees in 2000 is therefore increased from 14885 to 14900. A complete list of changes to the data set can be found in Appendix One.

For the first projection decade – 2000 to 2010, growth and change which has already occurred (through 2003) is included where possible. Since this covers approximately one-third of the ten year projection, any growth beyond the one-third value is considered

additional growth for the decade – growth beyond the expected norm. For each decade, transportation improvements can also result in the forecasting of additional growth.

3.1.2 Control Totals

The rate of employment growth should approximate the rate of population growth. However, with the Lafayette study area being a major center for numerous surrounding parishes, the expectation is that employment growth should slightly exceed population growth – growing approximately one-half of one percent faster (see Section 2.1 for rationale). For example, Lafayette is now a major medical center. A decade or two ago, patients might have traveled to New Orleans or Houston for specialized procedures – that is far less likely today. Being a major hub for transportation, finance, tourism, and retail activities allows the area to create jobs that rarely exist in small centers.

For 2020 and 2030, the employment growth rates are in line with expectations. For 2010, the retail employment growth rate is significantly higher (by 3.7 percent) than population growth; this due to the rapid growth seen in the first part of the decade (2000-2003). But overall employment totals remain within expected limits. Table 3.1.2-1 summarizes the employment projection totals for the study area. Table 3.1.2-2 compares employment growth with population growth.

Table 3.1.2-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Employment Projection Totals – 2010, 2020 and 2030

Employment Type	2000	2010	2020	2030
Retail Employment	28344	32842	36303	39527
Other Employment	86556	97642	107893	117138
Total Employment	114900	130484	144199	156665

Table 3.1.2-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Employment Growth Versus Population Growth

Employment Type	2000-2010	2010-2020	2020-2030
Retail Employment	15.9%	10.5%	8.9%
Other Employment	12.8%	10.5%	8.6%
Total Employment	13.5%	10.5%	8.6%
Population	12.2%	10.0%	8.3%

It is estimated that 2239 retail employees were added in the study area from 2000 to 2003. This time period represents approximately one-third of the 2010 projection. Since population has grown more rapidly in these three years than is projected for the remainder of the decade, it is assumed that the 2239 retail employees represent approximately forty percent of the likely growth. If population is expected to increase 12.2% from 2000 to 2010, then sixty percent of that growth should be seen after 2003 (60% of 12.2 = 7.32). With 28344 retail employees, that would translate into an additional 2075 retail employees (7.32% of 28344). Thus 2239 retail employees through 2003, plus an additional 2075 during the rest of the decade, plus an expectation that growth is one-half percent above population growth (another 142), leads to a control total of 32800 (28344+2239+2075+142). The projected value for retail employees in 2010 is 32845. Thus while the rate of increase over the decade appears quite large, the projection actually is a very conservative estimate of retail growth to 2010.

If it is found that population grew more slowly (or more rapidly) than expected, and employment projections need to be adjusted, one can make minor changes by multiplying currently projected values by a factor which slightly modifies the results. For example, to obtain slower growth, employment totals (done separately for retail and other employment within each TAZ) could be multiplied by .99 (or 1.01).

3.2.0 RETAIL EMPLOYMENT PROJECTIONS

Retail employment is dependent upon a population to purchase goods and services. As the population increases, greater retail employment can be expected. Since the Lafayette region services as a regional hub, however, growth outside of the study area can also contribute to greater retail employment within the study area. With a very mobile population, retail establishments depend not only on their immediate area, but adjacent areas as well. Thus even areas with declining or very slow growing populations might see continued growth in retail activity. The two primary predictive factors used are where the retail center fits in the hierarchy of business centers (the nature and variety of the goods and services it offers) and the population growth of area the retail center serves.

3.2.1 Retail Center Hierarchy

The study area is divided into a series of retail centers. Growth depends both on the size of the center and the population growth of the area which it serves. Thus, two variables help determine growth in retail employment. Reasoning used is drawn from Central Place concepts frequently used in business economics and geography. Retail centers are organized in a hierarchy, with only a few centers at the top and many small centers at the base of the hierarchy. Retail districts at the top of the hierarchy draw from the entire region and provide high threshold goods and services. High threshold implies that the business must draw from a very large number of people to generate the number of customers it needs to succeed. A specialized camera and photography store might have to draw from much of the study to get enough customers to succeed. The districts at the top of the hierarchy offer a full range of services including department stores, large

power stores and specialty stores. Historically the Central Business District (downtown) has been at the top of the hierarchy. In this study area, the Acadiana Mall area is placed at the top of the hierarchy. In 2000 the Acadiana Mall area had over 6500 retail employees. Retail centers at the lower part of the hierarchy simply provide low threshold goods and services to the immediate area. A low threshold implies that a business need only draw from a small number of people to get enough customers to succeed. Examples of low threshold establishments include convenience stores, gas stations, and local bars. Low threshold establishments can succeed by drawing from smaller populations if a large portion of the population patronizes them or if those who patronize do so frequently. The Broussard area with approximately 750 retail employees in 2000 is an example of an intermediate center. Maurice, with 65 retail employees in 2000 is an example of a small center at the base of the hierarchy.

Nearly thirty separate business centers have been identified and ranked based upon their size (total number of employees) and the variety of goods and services offered (TAZs included in each business center are listed in Appendix Two). Those centers at the top of the hierarchy have higher multipliers (used to project employment growth). Those centers with multiples of 1.5 or more tend to have major department stores (Sears), large discount stores (Walmart, Target) and several major establishments with significant drawing power. The high threshold centers have numerous establishments for which people are willing to drive well beyond their neighborhoods to patronize. The centers at the top of the hierarchy have higher multipliers as they are able to draw customers from a large portion of the study area. This is true of both concentrated business districts (Acadiana Mall, Central Business District), as well as those associated with a linear transportation line (Johnston Street, Kaliste Saloom). When population grows, small business centers at the base of the hierarchy might add a few employees to existing businesses and perhaps open a new business. But these centers only have a very limited number of different kinds of establishments. The multiplier for the small centers at the base of the hierarchy is 1.0. Those centers at the top of the hierarchy also add more employees to continuing and new establishments. But because these centers offer a tremendous variety of goods and services (basic low threshold establishments, intermediate threshold level establishments, and high threshold establishments) a much larger number and variety of employees will be added. With expansion these centers have many different kinds of businesses which might be added. With growth, these centers may now add businesses which could not exist here before, creating new employment opportunities.

Furthermore, the large centers benefit from agglomeration. The large number of establishments located together typically pulls in far more customers than if the establishments were located in locations apart from one another. This clustering enhances the growth potential for all the establishments in the large center. It boosts the likelihood that larger centers will grow more rapidly.

The multipliers remain the same throughout all three projection decades. The only exception is Johnston Street South (beyond the Acadiana Mall area to the Vermilion

Parish line). This center's multiplier is raised from 1.2 to 1.3 in the 2020-2030 projection. This area is projected to become a dramatically more important retail center. With the extension of Ambassador Caffery Parkway South from Verot School road to Highway 90 – a new retail business center is expected to develop by 2010. This Ambassador Caffery Parkway South center has a multiplier of 1.2 for the 2020 and 2030 projections.

Table 3.2.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Retail Centers - Hierarchical Multipliers

Retail Center	**Multiplier**
Acadiana Mall	1.8
Kaliste Saloom Rd.	1.6
Pinhook South	1.6
Ambassador Caffery-north	1.6
Breaux Bridge	1.6
Johnston St.- intown	1.6
Oil Center	1.5
Northgate Mall	1.4
Broussard	1.4
Saints Streets area	1.4
I-49/NE	1.4
Carencro	1.3
Lafayette CBD	1.2
University Ave./Willow	1.3
Louisiana Ave./E. Lafayette	1.3
Congress St.	1.2
Johnston St. South	1.2 [14]
Henderson	1.2
University Ave. N	1.1
Scott	1.1
Youngsville Vicinity	1.0
South Hwy 90	1.0
St. Martin SE	1.0
Mire	1.0
Coteau	1.0

[14] Johnston Street South is 1.3 in 2020

Table 3.2.1 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **Retail Centers - Hierarchical Multipliers**	
Maurice	1.0
Duson	1.0
Others	1.0
Ambassador Caffery Parkway South	N/A[15]

3.2.2 Retail Center Service Area Growth Rate

Each business center is associated with a geographic area. Those centers at the top of the hierarchy draw from very large areas to get their requisite number of customers. Those centers at the base of the hierarchy tend to draw most of their customers from the immediate geographic area. The area of influence of each business center is different. Each business center is associated with a population growth rate. Those centers at the top of the hierarchy draw from much larger areas. Hence for the Acadiana Mall, the population growth rate of the entire study area is used. For the City of Breaux Bridge the population growth rate of the entire portion of the study area in St. Martin Parish is used. For Maurice, lower on the hierarchy, the population growth rate for the twenty adjacent TAZs in Vermilion Parish is used. For 2020 and 2030, the population growth rates for several of the centers are very low, and in a few cases the population is not growing at all. For purposes of retail employment projections all centers are projected to grow a minimum of 4.5% from 2000 to 2010; a minimum of 4.0% from 2010 to 2020; and a minimum of 3.0% from 2020 to 2030. The continued sustained population growth throughout the study area is expected to positively impact all centers.

Table 3.2.2 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **Population Growth Rates for Retail Centers**			
Retail Centers	**2000-2010**	**2010-2020**	**2020-2030**
Acadiana Mall	12.0	10.0	8.0
Kaliste Saloom Rd.	18.5	8.0	4.0
Pinhook South	7.5	7.0	5.0
Ambassador Caffery Parkway North	7.0	10.0	8.0
Breaux Bridge	14.5	13.5	10.2
Johnston St.- Intown	4.5	4.0	3.0
Oil Center	4.5	4.0	3.0

[15] Ambassador Caffery South is 1.2 in 2010 and 2020.

Table 3.2.2 Lafayette Metropolitan Planning Organization 2030 Transportation Plan **Population Growth Rates for Retail Centers**			
Northgate Mall	7.0	5.0	4.0
Broussard	13.5	15.0	12.5
Saints Streets area	4.5	4.0	3.0
I-49/NE	8.0	7.0	6.0
Carencro	14.5	13.5	14.0
Lafayette CBD	5.5	5.0	3.5
University Ave./Willow	7.0	5.0	4.0
Louisiana Ave/E. Lafayette	4.5	4.0	3.0
Congress St.	4.5	4.0	3.0
Johnston St. South	20.0	25.0	16.5
Henderson	14.5	14.0	12.5
University Ave. N	14.0	13.0	12.0
Scott	10.0	7.1	5.0
Youngsville Vicinity	30.0	25.0	20.0
South Hwy 90	25.0	23.0	20.5
St. Martin SE	12.0	11.5	11.0
Mire	11.0	13.5	13.0
Coteau	22.0	21.0	19.5
Maurice	12.6	13.3	12.1
Duson	11.0	11.0	8.5
Ambassador Caffery Parkway South	N/A	N/A	16.4

3.2.3 Growth Through 2003

The base data are for the year 2000. Growth through 2003 has been estimated where possible. Information has been gathered from the Lafayette Consolidated Government and Metropolitan Planning Organization regarding new retail building and activity, and from LEDA regarding employment growth to both new and existing establishments. This information has been added to and scrutinized through personal observation throughout all of the study area. While time has not permitted a complete and exhaustive verification, this approach is more than adequate, as one is dealing with a sample, rather than an exhaustive list of businesses. The employees identified primarily represent larger businesses with more than twenty-five employees.

Growth through mid-2003 represents approximately one-third of the projection period. Thus new retail employees beyond that value are added to the projection total for the

decade. Thus if a TAZ with 100 employees is projected to increase by thirty percent, it is assumed that one-third, or 10 new employees would be added during the first three years. If it is found that 8 new employees are added from 2000 to 2003, this would have no impact upon the projection. If, however, it is found that 30 new employees are added from 2000 to 2030, then one-third (10) were assumed, the remaining (20) are in addition to expectations. Hence the TAZ is no longer expected to increase from 100 to 130, but rather from 100 to 150.

In verifying the location of businesses by TAZ, it was found that a number of establishments were not included. A partial explanation is the use of a seventy-five percent sample. Thus many of these businesses are really included even though their names and addresses do not appear within the data set. However, where larger employers are not included in specific TAZs, these employees are assumed to have been added between 2000 and 2003. This helps explain the large number of employees added between 2000 and 2003. Thus for 2010, the rapid rate of retail employment growth is due to several factors including the more rapid rate of population increase, the rapid rate of retail expansion from 2000 to 2003, and the addition of several heretofore not included businesses. The same conclusions can be made for the projection of Other Employment, though to a much lesser degree.

From 2000 to 2003 a total of 2239 employees were added to seventy-four TAZs in the study area.

3.2.4 Transportation Variable

The same transportation improvements assumed for the population projections are included in the employment projections. The following transportation improvements are assumed and affect employment projections:

2000-2010 – Interstate 10 frontage roads (Breaux Bridge to Henderson, Scott to Duson)
Louisiana Avenue exit from Interstate 10
2010-2020 – South Ambassador Caffery Parkway South from Verot School Road to US Hwy 90
-- Completion of Interstate 49 through Lafayette to Iberia Parish border of the study area
2020-2030 – Continued impact of Interstate 49

For 2000 to 2010 some of the employment growth initially projected for the Acadiana Mall area is diverted further out along Johnston Street (to the Vermilion Parish border). Limited space in the Acadiana Mall complex will likely encourage development further south along Johnston Street.

For 2010 to 2020 some of the employment growth initially projected for the Kaliste Saloom area is diverted to the new Ambassador Caffrey South extension. Limited space along Kaliste Saloom and rapid population growth in the TAZs to the south should

encourage retail development along the new roadway. The development of Interstate 49 through the City of Lafayette will likely cause the closure of businesses in several central TAZs during construction and redevelopment.

For 2020 to 2030 retail business redevelopment is projected in the area adversely affected by construction of Interstate 49 in the previous decade.

A total of 291 additional employees in thirty TAZs are added between 2000 and 2010 due to transportation improvements. A total of 136 additional employees in thirty-three TAZs are added between 2010 and 2020. Included in this total is a decline of 84 employees due to construction of Interstate 49 in central Lafayette. A total of 276 additional employees in thirty TAZs are added between 2020 and 2030. Included in this total is an addition of 128 employees in the redeveloped area of Interstate 49 in central Lafayette.

3.2.5 Retail Employment Projection Examples

The retail employment methodology is illustrated in the following two examples. An example incorporating the transportation variable is included under Other Employment (Section 3.4).

The Oil Center in Lafayette is relatively high on the hierarchy of business centers. In 2000, the Oil Center area had 1932 retail employees. The multiplier is 1.5, representative of a larger business center drawing from a large portion of Lafayette and containing a variety of higher threshold specialty stores. The population growth rates for the three projection periods are 4.5%, 4.0 % and 3.0%. These are the minimum values used for any business center for each time period. The population in the area surrounding the Oil Center actually grew at even slower rates, but usage of the minimum values is logical considering the draw of customers, especially from those employed in non-retail activities within the Oil Center area. An estimated 40 new employees were added from 2000 to 2003.

The growth factor for 2000-2010 is the multiplier (1.5) times the population growth rate (4.5%). Therefore the growth factor is 6.75. With 1932 employees in 2000, the expected number of new retail employees in 2010 is 130. One-third of these new employees can be expected in the first three years (43). With 40 new employees from 2000-2003, this is within expectations. Therefore the original growth factor of 6.75 is used. Thus the new total for 2010 is 1932 + 130 = 2062. This is, of course, only an approximation, as the actual calculations are done at the individual TAZ level.

Retail Employment Growth = (Multiplier)(Population Growth Rate)(Retail Employment)
2000-2010: (1.5)(4.5)(1932) = 130
2010-2020: (1.5)(4.0)(2062) = 124
2020-2030: (1.5)(3.0)(2186) = 98

The business center in the Village of Maurice is a small center at the base of the hierarchy. In 2000 Maurice had 65 retail employees. Through personal observation and discussion with the Village Clerk of Maurice it is estimated that an additional 30 employees have been added from 2000 to 2003. The multiplier for this center is 1.0. The population growth rates for the three projection periods are 12.6%, 13.1% and 12.1%. The area served by Maurice includes all twenty TAZs within the Vermilion Parish portion of the study area. Only seven of these TAZs have retail employees.

The growth factor for 2000-2010 is the multiplier (1.0) times the population growth rate (12.6%). Therefore the growth factor is 12.6. With 65 employees in 2000, the expected number of new retail employees in 2010 is 8.2. One-third of these new employees can be expected in the first three years (2.7). With 30 new employees from 2000-2003, this leaves an excess of approximately 27.3 employees to be added to the total. For the Maurice TAZs, the multiplier of 12.6 is no longer used, as 2.7 employees for the first three years have already been added in. The new multiplier is 8.5 (8.2-2.7=5.5; 5.5/65=.085). Thus the new total for 2010 is 65+5.5, plus 27.3 added in the first three years for a total of 97.8. When applied to individual TAZs, rounding results in a total of 100.

For 2020, the growth factor is 13.1 (1.0 multiplied times 13.1) and for 2030, the growth factor is 12.1 (1.0 multiplied times 12.1). This is however, calculated at the individual TAZ level.

Table 3.2.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Retail Employee Example – Maurice

TAZ	2000[16]	2010	2000-2003	2010 Total	2020 [17]	2030[18]
904	41	44	4	48	54	60
905	8	9	2	11	12	14
906	1	1	0	1	1	1
907	9	10	0	10	11	12
908	5	5	0	5	6	7
909	1	1	4	5	6	6
910	0	0	20	20	22	25
Total	**65**	**70**	**30**	**100**	**112**	**125**

[16] (2000 x 1.085)
[17] (2010 x 1.131)
[18] (2020 x 1.121)

3.3.0 OTHER EMPLOYMENT PROJECTIONS

Other Employment includes all businesses with the exception of retail activities. Unlike retail, growth in employment is not related to population growth in specific neighborhoods. Other Employment growth is driven by the overall population growth rate for the study area. Several industry sectors are, however, expected to grow slightly faster than the population. Thus the medical industry is expected to grow fifteen percent faster than the overall growth rate. Lafayette serves as a regional medical center and the health care industry is expanding rapidly throughout the country. The oil industry has had periods of both rapid growth and decline over the last several decades. For the oil industry employment growth is averaged out to project moderate sustained growth over the next three decades. Education employment is done separately utilizing the school attendance figures projected (see Section 4.3) and then combined with other categories.

This methodology projects that employment in the Other Employment category will grow only slightly faster than the population growth rate.

3.3.1 Growth Rate by Industry Sector

Most of the categories which make up Other Employment are expected to grow at approximately the same rate as the population in the study area. The population growth rates for the study area are projected to be 12.2% between 2000 and 2010, 10.0% between 2010 and 2020, and 8.3% between 2020 and 2030. Industry categories such as manufacturing, wholesale trade, real estate, personal and business services, legal services, social services, engineering and accounting are projected to increase at a comparable rate to the population. Specific industry categories which are expected to grow slightly faster than the population are included in Table 3.3.1

Table 3.3.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Growth by Industry Categories – Compared to Population Growth

Industry	**Growth Factor**
Building Trades	1.05
Computer related services	1.20
Construction	1.05
Finance	1.10
Government	1.05
Hotels	1.05
Medical	1.15
Oil and gas	1.075
Transportation and warehousing	1.10
All other categories	1.00

The above industry categories are designated as faster growing sectors based upon the regional specialization of the Lafayette region (medical, transportation, finance and tourist center) and sectors which are fast growing in all parts of the country (medical, computers, government). The Lafayette area has a greater percent of its employment in these regional specialties when compared with the national average.

The oil and gas industry is projected to grow at approximately 7.5% per decade. This is slower than the population growth rate. Modest continued growth in the oil industry is thus expected, though there certainly may be periods of more rapid growth and periods of employment declines.

3.3.2 Growth Through 2003

As with retail employment, information regarding growth in Other Employment was collected from Lafayette Consolidated Government, the Metropolitan Planning Organization, LEDA, and personal observations. The employees identified between 2000 and 2003 primarily represent larger businesses with more than twenty-five employees. Growth through mid-2003 represents approximately one-third of the projection period. Thus new employees beyond that value are added to the projection total for the decade. Thus if a TAZ with 100 employees was projected to increase by thirty percent, it is assumed that one-third, or 10 new employees would be added during the first three years. If it is found that 8 new employees were added from 2000 to 2003, this would have no impact upon the projection. If, however, it is found that 30 new employees were added from 2000 to 2030, then one-third (10) were assumed, the remaining (20) are an addition to expectations. Hence the TAZ is no longer expected to increase from 100 to 130, but rather from 100 to 150.

From 2000 to 2003 a total of 2196 employees were added to fifty-five TAZs in the Study Area. A new industrial park in the southwest part of St. Martin Parish is included.

3.3.3 Transportation Variable

The same transportation improvements noted under retail employment are utilized to project Other Employment.

2000-2010 – Interstate 10 frontage roads (Breaux Bridge to Henderson, Scott to Duson)
Louisiana Avenue exit from Interstate 10
2010-2020 – South Ambassador Caffery Parkway South from Verot School Road to Highway90
– Completion of Interstate 49 through Lafayette to Iberia Parish border of the study area
2020-2030 – Continued impact of Interstate 49

A total of 363 additional employees in thirty-two TAZs are added between 2000 and 2010 due to transportation improvements. A total of 176 additional employees in thirty-

seven TAZs are added between 2010 and 2020. Included in this total is a decline of 265 employees due to construction of Interstate 49 in central Lafayette. A total of 650 additional employees in thirty TAZs are added between 2020 and 2030. Included in this total is an addition of 430 employees in the redeveloped area of Interstate 49 in central Lafayette. While the impact is modest, transportation improvements do influence employment growth in a variety of industrial sectors.

3.3.4 Other Employment Projection Examples

For a projection example, two TAZs have been chosen which illustrate several categories of employment growth, incorporating growth from 2000-2003, including a transportation improvement, and the addition of education employment.

TAZ 9 is located on the western side of the Lafayette Central Business District and includes Cathedral Carmel Catholic School. Other Employment in 2000 was 641. Growth in employment is projected by industry category. For 2000-2010 the overall population growth rate is 12.2%. Therefore, since the area of finance and insurance is expected to grow ten percent faster, its growth rate is projected to be 13.42%. The school employment is projected separately based upon expected growth in school attendance (5.4% 2000-2010). An estimated 15 new employees were added from 2000 to 2003, not enough to influence the total.

Table 3.3.4-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZ 9 -- Projection of Other Employment

Category	2000	Growth Rate	2010	Growth Rate	2020	Growth Rate	2030
Finance & Insurance	129	1.134	147	1.11	163	1.093	178
Legal, etc	392	1.122	440	1.10	484	1.083	524
Education	120	1.054	127	1.046	132	1.030	136
Total	641		714		779		838

TAZ 700 is located in southwest St. Martin Parish, the eastern portion bordering on the new Interstate 49 route. Other Employment in 2000 was 33, all of it in the oil and gas category. Oil and gas related activities are expected to increase by 7.5% each decade. No new employees are added due to growth from 2000 to 2003 and the TAZ contains no school enrollment. Transportation improvements with the development of Interstate 49 are projected to add fifteen new employees between 2010 and 2020, and ten new employees between 2020 and 2030.

Table 3.3.4-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
TAZ 700 - Projection of Other Employment

Category	2000	Growth	2010	Growth	2020	Transp	Growth	Transp	2030
Oil & Gas	33	1.075	35	1.075	15	53	1.075	10	66

3.4.0 SCHOOL ATTENDANCE AND EMPLOYMENT

A comprehensive list of schools with their attendance figures and number of employees has been provided by the Metropolitan Planning Organization. This information has been carefully verified, adjusted where necessary, and now appears to be an extremely complete and accurate data set. School attendance and employment are projected separately for each school for each decade. Overall school attendance is expected to increase at a slightly slower rate than the population as a whole, reflective of the aging of the population in the study area.

Table 3.4.0-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
School Attendance – 2000, 2010, 2020 and 2030

Grade Level	2000	2010	2020	2030
Grades K-12	42804	47858	52474	56781
Univ. of Louisiana at Lafayette	14060	17013	18033	19115
Other Adult Education	858	963	1058	1146
Total	**57722**	**65834**	**71565**	**77042**

Table 3.4.0-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
School Attendance (Grades K-12) and Population Growth

Time Period	Population Growth	School Attendance Growth
2000-2010	12.20%	11.80%
2010-2020	10.00%	9.60%
2020-2030	8.30%	8.20%

3.4.1 Factors Considered In School Attendance Projections

Attendance projections for public and Catholic elementary, junior (middle) and high schools are based upon population growth in their surrounding TAZs. Specifically, growth in the number of school age individuals is used, augmented by overall population growth as overall growth numbers are more reliable than age structure numbers.

Attendance projections for other schools (religious and independent) are based upon the overall growth rate of the study area, as it is assumed that these schools do not draw from within limit boundaries, but rather from a much larger area. Trade schools and commercial colleges also have their growth based upon growth of the study area. The University of Louisiana at Lafayette is treated separately (see Section 4.2).

In determining the population in the TAZs surrounding individual schools, current attendance zones or boundaries are not utilized. It is assumed that attendance zones and boundaries will change numerous times over the projection periods. Hence, geographically adjacent areas are grouped together. Since separate school districts exist in each parish, parish boundary lines are not crossed when assigning TAZs.

The only new school found to open between 2000 and 2003 is the Lafayette Charter High School. The Catholic Diocese indicates it is very likely that a new elementary school will be opened in Scott, and this new school has been included in the projection for 2010. The enrollment in nearby elementary schools is adjusted appropriately. New construction will definitely be needed over the ensuing decades, but at this time no firm locations are designated. Therefore, attendance has been assigned to existing schools. It is realized that this creates some schools with extremely large, and probably unworkable enrollments. No schools are shown to decline in enrollment, even if the population growth in its immediate area is expected to be negative. It is assumed that authorities will make use of whatever space is available. Assembly Christian School closed between 2000 and 2003 and is not included in future projections.

3.4.2 University of Louisiana at Lafayette

It is believed that attendance at the University of Louisiana at Lafayette is underestimated for the year 2000. Attendance in 2000 is listed as 14,060 students. This apparently omits students residing in dormitories. All students have been included in this study. The university estimates enrollment in Fall 2003 as 16,208 students. Thus the growth rate in attendance from 2000 to 2010 (21%) appears relatively high using 14,060 as the base. University enrollment is projected to increase modestly from 2003, approximately six percent per decade.

3.4.3 School Employment Projections

School employment projections are reflective of attendance changes in each school. Based upon 2000 employment, ratios of employees to students are maintained in the projections. These ratios can differ significant between elementary and high schools and between public and private schools. Thus if enrollment in a school is expected to increase by ten percent from 2000 to 2010, its number of employees is also projected to increase by ten percent from 2000 to 2010. Thus calculation of number of employees within education is projected independently of any of the other employment projections. The employment in education has been added into, and thus included with the Other Employment projections.

3.5.0 Employment Summary

Based on expected moderate sustained population growth through 2030, employment is projected to also increase. Employment is projected to increases at a similar, though slightly faster pace than the population. School attendance should increase at a slightly slower rate than the population growth rate.

4.0 EMPLOYMENT SURVEY

4.1.0 EMPLOYMENT SURVEY

The employment survey was conducted by Metropolitan Planning Organization (MPO) staff over a three year period from 2000-2003 using official state of Louisiana employment records. The original 2000 data set contained employers, their address, and the number of workers in Lafayette Parish during the first quarter of 2000. However, the workers from adjoining portions of Acadia, Iberia, St. Martin, and Vermilion Parishes were added to the project in 2002 as the project study area was increased. Additionally, Traffic Analysis Zones (TAZ) boundaries were modified as several zones were split and as the resulting TAZ's were re-numbered.

4.1.1 The Survey Goal

The goal was to locate a geographic point where each business is placed within its proper Traffic Analysis Zone (TAZ) and then to determine within each TAZ:

1) the total number of employees;
2) the number of retail employees;
3) the number of non-retail employees.

These three totals are variables used to predict the number of vehicle trips to and from each TAZ.

4.1.2 Data Challenges

The comprehensiveness of the official state of Louisiana employment records data insured that the data was a suitable to locate all the businesses within the study area. The data, however, presented several significant challenges in determining the location of a business and then establishing its placement within a particular TAZ. These difficulties were related to:

1) access to the data was limited to MPO staff and their consultants and subject to non-disclosure;
2) some employers are listed by street addresses;
3) some employers are listed by post office addresses;
4) some employers with multiple locations are listed as one record;
5) some employers with multiple locations are listed as multiple records;
6) some employers are listed by their regional or national office's address where payroll records are processed;
7) some employers utilize non-standard addresses for mailing or site address;
8) some workers do not work at the address listed, but work outside the project area;
9) not all workers are employed in Lafayette Parish; and

10) some workers are employed in parts of Acadia, Iberia, St. Martin, and Vermilion Parishes which are not part of the study area.

4.1.30 Year 2000 and 2002 Data Sources

The MPO staff requested the 2000 and 2002 data from the Louisiana Dept. of Labor via a letter from the Lafayette Consolidated Government (LCG) Director of Traffic and Transportation to the Metropolitan Planning Organization (MPO) Liaison staff at the Louisiana Dept of Transportation and Development (DOTD). DOTD then request the files form the Louisiana Department of Labor (LDOL).

The Lafayette MPO received a computer LDOL file of employers for the first quarter of the year 2000 for Lafayette Parish and for the first quarter of year 2002 for Lafayette, Acadia, Iberia, St. Martin and Vermilion. The file contained data with the 16 fields as listed in the table below.

Table 4.1.30
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
2000 and 2002 Employment Survey Data Fields
Names And Descriptions of Louisiana Department of Labor Employers Fields

Names	Description
EMPNAME	employer name
DBANAME	doing business as name
PARISH	parish number
MUNI	municipal address
STREET_PO	street name or post office box
CITY	street name
STATE	state name
ZIP	Zipcode
YRQT_2000	annual quarter number
JAN_2000	employees during first month of quarter
FEB_2000	employees during second months of quarter
MAR_2000	employees during third month of quarter
EAACCT	employer account number
SIC	standard industrial code number
PHY_MAIL	Presence of physical address or mailing address
MULT	Multiple business location or single business location.

4.1.31 Year 1995 Data Sources

The Lafayette MPO had previously conducted a similar research project for the 1995 Lafayette Parish update of the traffic modeling variables. This research documented the TAZ of all businesses with a single address. This previous research was problematical because employers with multiple addresses were not recorded in the file.

Most of the 2000 data fields described above were populated in the 1995 file. The file was sorted by TAZ showing each zone's business and the number of its employees. The employer account number (EAACT) was used to match records from the 1995 to the 2000 data years. The 1995 field names are described below:

Table 4.1.31
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
1995 Employment Survey Data Fields Names and Descriptions

Names	Description
ID_95	unique id given by LCG in 2000
EAACCT_ID	Employer account number
TAZ_95	the TAZ number
SIC_95	the standard industrial code
PAR_95	the parish code
PHY_95	the presence or absence of a physical address
MUL_95	the presence or absence of a single place of business
EMP_95	the employer name
DBA_95	the "doing business as" name
ST_95	The municipal number and street address or post office box
CITY_95	the city
STATE_95	the state
ZIP_95	the zipcode
YRQT_95	the annual quarter number
JUL_95	employees during the first month of the quarter
AUG_95	employees during the second month of the quarter
SEP_95	employees during the third month of the quarter

4.1.40 Classification of Business Activity

There are two systems of classification of business activity. The first is the older Standard Industrial Code (SIC) which was documented in the LDOL files. The second is a newer system: North American Industry Classification System (NAICS). Both systems were used in the analysis of business activity.

4.1.41 Standard Industrial Code (SIC)

The standard industrial codes were available online from the US Census Bureau. Using these codes, it is possible to distinguish between retail and non-retail employment. The 1987 U.S. SIC Description and its corresponding codes are listed below for retail trade listing the Sic - 4 digits code and the associated description.

Table 4.1.41
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Standard Industrial Codes (SIC) for Retail Trade

4 digit SIC Code	Description of SIC Code
5200	Building materials, hardware, garden supply, & mobile
5300	General merchandise stores
5400	Food stores
5500	Automotive dealers and gasoline service stations
5600	Apparel and accessory stores
5700	Furniture, home furnishings and equipment stores
5800	Eating and drinking places
5900	Miscellaneous retail

4.1.42 The North American Industry Classification System (NAICS)

Associated with these SIC codes is a new classification system named The North American Industry Classification System (NAICS). The SIC codes were matched to its corresponding the NAICS codes. The SIC and NAICS data fields are listed in the table below:

Table 4.1.42
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
The North American Industry Classification System (NAICS) Field Names and Descriptions For Louisiana Department of Labor Employers

Field Names	Descriptions
NAICS_NAME	the new text name of business classification
SIC_NAME	the old text name of the business classification
NAICS_1	the first component classification NAICS number
NAICS_2	the second component classification NAICS number
NAICS_3	the third component classification NAICS number
SIC	the old sic number
SIC_TX6	the sic number converted to text characters
SIC_NO6	the sic number maintained in numeric characters
SIC_NO4	the first four digits of the sic number
SIC_TX2	the second two digits converted to text characters

4.1.5 Data Field Matching

Thus, there are four data sets that were combined to create employment data: the 2002 LDOL Data Set, the 2000 LDOL data, 1995 LDOL data, and the SIC/NAICS data. The 2000 data set was matched to the 1995 using the EAACCT data field which is employer account number given by the Louisiana Dept. of Labor. This combined 2000 + 1995 data set was then matched to the SIC/NAICS data using the SIC number. The presence or

absence of retail trade was added using the 1987 SIC classification system. The 2002 data set records were added to the original 1995 + 2000 data set. There was no corresponding 1995 records associated with the 2002 data because the 1995 set was derived from a Lafayette Parish Survey and the 2002 data set was derived from the surrounding parishes.

4.1.6 TAZ and Employer Address Plotting by Latitude and Longitude

The non-proprietary address data was submitted to Lafayette Consolidated Government (LCG) Information Services for data plotting on the centerline address map developed by LCG Planning Zoning and Codes for Lafayette Parish. The address listed in the LDOL file was matched to address files used by LCG and then evaluated by the degree of match and given a score. Where a match existed, the 2003 TAZ in which the address was located was found and documented. For areas outside of Lafayette Parish, the 2000 US Census Bureau maps (i.e. tiger maps) were used by the MPO staff. The result was a location coordinate for each employer based on its address. This location coordinate was then matched the proprietary data sets (2000, 1995, and SIC/NAICS) using the unique employer number assigned by LCG staff.

The data fields created during address geocoding are listed in the table below:

Table 4.1.6
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Field Names and Descriptions of Geographic Coding of Addresses

Field Names	Description
AV_ADD	a composite street and municipal address concatenated from LDOL fields
AV_ZONE	a city address name
AV_STATUS	match if one was possible between LDOL and LCG data
AV_SCORE	the degree of the match between LDOL and LCG in percentage points
AV_SIDE	the right or left side of the street
TAZ	the traffic analysis zone in which the business address was found
LATITUDE	x/easting coordinate in NAD 83 state plane coordinates
LONGITUDE	y/northing coordinate in NAD 83 state plane coordinates

4.1.7 Evaluation of Geo Coordinates

Within Lafayette Parish, there are a total of 100,185 workers and 7,338 employers. There were 983 employers with 15,664 workers that were not plotted to a physical location primarily due to post office address or problems in original address formatting. The totals of the success of the geo-coding by address are listed below in the following table:

Table 4.1.7
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Evaluation of Total of Employers and Workers Geo-coded in Lafayette Parish

Total Employers	Total Workers	Set Evaluation
893	15,664	No latitude and longitude
6355	84,521	a latitude and longitude
7,338	100,185	total

The geocoding of the Acadia, Iberia, St. Martin and Vermilion Parishes yielded 378 employers with 7,932 workers. There were few employers in the sparsely settled areas mostly in Acadia, and Iberia Parishes. However, St. Martin Parish, an epicenter of employment, contained the largest percentage of workers in City of Breaux Bridge with a population of 7281; in Vermilion Parish, the Village of Maurice with a population of 642 is a second epicenter of employment.

4.1.8 Data Subsets

This locations of employers were divided into sets by the degree of reliability of a geo-coding. As noted in Table 4.1.6, each address located was rated in terms of the degree to which a LDOL address matched the address information used in placing its location point. Some locations with a high degree of reliability were reviewed for readily identifiable errors. Other locations with low degrees of reliability required further research thorough other databases and phone surveys. Within Lafayette Parish, the entire data set was divided into sets to locate employers with a high degree of reliability in their geo-coding of their address and to locate employers with many workers. Outside of Lafayette Parish, the data sets were more problematical in Acadia, Iberia, St. Martin and Vermilion Parishes. In general, the total population within the non-Lafayette Parish project area could only be estimated using zip codes, names of roadways, and address ranges. In these outlying areas, subsets were identified to a low level of probability and then geo-coded to determine if the employers were located within the project area.

Other than the distinction between internal and external to Lafayette, key distinctions were to determine if a location was single or multiple and if the employer was an oil field business with workers employed outside of Lafayette Parish. If the employer's location was problematical, then research of Lafayette Parish tax assessments and phone surveys were conducted to determine its location and the number of workers at a given location. These problematical locations were rank ordered from the most to least workers and then researched from employers with most workers to least workers.

4.1.9 Differentiation of Sets

Using these distinctions, sets and subsets of data were differentiated such that:

Data Set 1 contains all the records in Lafayette Parish.

Data Set 1 is divided into two sets:

- Data Set 2 which contains inactive corporations without workers.
- Date Set 3 being all remaining businesses.

Data Set 3 is divided into two large sets:

- Data Set 3.1 is a residual set which is analyzed further and described below
- Data Set 3.2. contains business listed with a single location with an address match evaluated at being equal to 80% or greater. Data Set 3.2 contains 33,800 employees and 3,474 employers which could be located within the reported data. This accounts 33.7% for of the workers in Lafayette Parish and nearly half of all employers (47.3%). This data set was checked for obvious errors, particularly with those with the most employees.

Data Set 3.1 is divided into two sets:

- Data Set 3.11 is a residual set which is analyzed further and described below.
- Data Set 3.12 contains business which has the 1995 TAZ assignment equal to the 2000 TAZ assignment. There were 312 employers with 3,648 workers in this subset. This accounts for a very small portion of the data being about 3%.

Data Set 3.11 is divided into two sets:

- Data Set 3.111 contains business that had either 80% less than an address match and/or had multiple location or postal office address. This set contained 1794 employers with 44,697 workers. The set was the main focus of the phone survey, matching to internet maps and databases, matching to assessment records, and visual spatial analysis. The employers were rank ordered and those employers with the most workers were analyzed to determine their location. Genmerally speaking, employers were located through ones having seven employees or more.

- Data Set 3.112 contains businesses which has the single physical addresses with less than 80% address matching. This set contained 1383 employers with 17,729 workers. This set was subjected to a visual spatial analysis to identify addresses plotted to points and compared to street address maps. The incorrectly located addressed were re-assigned to the correct the address.

4.1.10 Aggregation of Results

Using the methods described in Section 1.9 and 1.10 above, workers were assigned and then aggregated to TAZ's into retail and non-retail workers using the SIC code.

There were good control totals for the number of workers and employers in Lafayette Parish. Simply put, we knew how many workers were supposed to be in the parish according to LDOL and we knew how many of these we located. However, identification of the workers and employers in the adjoining parishes was problematical. The total numbers of workers and employers were those which were located and identified as working in the study area. There were no workers who were identified as in the study area, but not located as part of the survey. This was a tautology (i.e. "a catch-22") in which once an address was identified, then it was located. It was impossible to identify an address which was not located because to identify the address meant that the address was automatically located. Thus, the location rate was 100% in these adjoining areas.

Table 4.10.1-1 and Table 4.10.1-2 below show respectively the percentage of employers and workers identified by the survey.

Table 4.10.1-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Computation of the Size of Sample of Employers

Data Set	Employers Total	Employers Located	Percent Located
2000 LDOL Data for Lafayette Parish	7337	4206	57.3%
2002 LDOL Data for Vermilion, Iberia, St. Martin, and Acadia Parishes	378	378	100.0%
Total	7,715	4,584	59.4%

Table 4.10.1-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Computation of the Size of Sample of Workers

Data Set	Workers Total	Workers Located	Percent Located
2000 LDOL Data for Lafayette	110,617	82,014	74.1%
2002 LDOL Data for Vermilion, Iberia, St. Martin, and Acadia Parishes	7,932	7,932	100.0%
Total	118,546	89,946	75.9%

As can be seen in the totals in the Table 4.10.1-2, 59.4% of the employers accounted for 75.9% of the workers. The reason that a lesser percentage of employers than workers were located is because the goal was to locate employers with large numbers of workers in order to account for more of the total number of workers. Certain employers were not

contacted: those who could not readily be located by computer address matching and who had less than generally 7 employees were not contacted. This simply was the point of diminishing returns at which 40.6% (100%-59.4%) effort was not worth the effort to identify 24.1% (100%-75.9%) of the remaining workers. These statements are true for about 60% of workers in the data sets (Set 3.11 as described above). However other sets such as 3.2 and 3.12 used automatic computer address geo-coding and thus many employers with small number of located and included in the sample.

Nevertheless, an assumption was made that the number of un-located workers is distributed evenly throughout the TAZ's. Thus, each Taz was increase by an additional 24.1% (100.0% less 75.9%) of workers previously located.[19]

This addition of un-accounted workers was not entirely valid because the workers identified were skewed to employers with many workers (as discussed directly above). Moreover in certain zones, all employers were identified because these zones contained only a few employers. This was particularly true of TAZ's for the University of Louisiana. These zones were increased by an additional 24.1%. This was clearly not valid, but the application of rules to increase some zones and not others was just as invalid; for few zones could be analyzed to determine which percentage of workers were not identified and located. In the end, the least complex method was to increase workers populations across the board.

4.1.11 Quality Control Analysis

A quality control analysis was performed on the data to determine if identified workers were assigned to the correct TAZ. The project occurred over many months with many different staff participating, using various techniques including paper and digital maps, and computer automatic assignment as well as individual human assignment. Thus, a measure of assurance was needed to assure that the data set was assigned validly. The results of the quality control check are listed below:

Table 4.11.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Quality Control Analysis of Type of Errors, Frequency With Confidence Interval And Level

Type of Error	Number of Errors	Sample Size	Percent Correct	Confidence Interval	Confidence Level
Incorrect TAZ	12	318	96.2%	2.67%	99%
Correct TAZ, but Incorrect Address	24	318	92.4%	3.7%	99%

[19] The number of all workers and non-retail workers were increased by 1.318% (the inverse of 75.9%) in each TAZ.

There were two types of errors. The significant error is listed first. These errors involved assigning workers to the wrong TAZ. Typically, the magnitude of the error was to assign the workers to adjoining zones, but there were several cases were north and south segments of the major roadways incorrectly labeled and assigned by the computer address geo-coding programs. These addresses were many miles apart from their true location.

The analysis of this first type of error permits the following statement: *96.2% (plus or minus 2.67%) of the workers were assigned to the correct TAZ based on a random sample that is probably correct 99% of the time.*

A second error is using an incorrect address, but locating the workers within the correct TAZ. The analysis of these error permits the following statement: *92.4% (plus or minus 3.7%) of the workers were assigned to the correct TAZ, but to the wrong address within the TAZ based on a random sample that is probably correct 99% of the time.*

4.1.12 Additional Quality Control Checks

Additional quality control checks are carried out on the sample during the employment projections by Dr. David Johnson. These checks resulted in two types of adjustments. The first set of adjustments are related to specific (and typically large) employers and schools as listed in Table 4.1.12-1. A second set of adjustments were generalized and corrected by TAZ as workers are re-positioned between adjoining TAZs or several small employers were identified as shown in Table 4.1.12-2.

Table 4.1.12-1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Adjustments in Frequency of Workers to the 2000 Data Set
Specific Employers

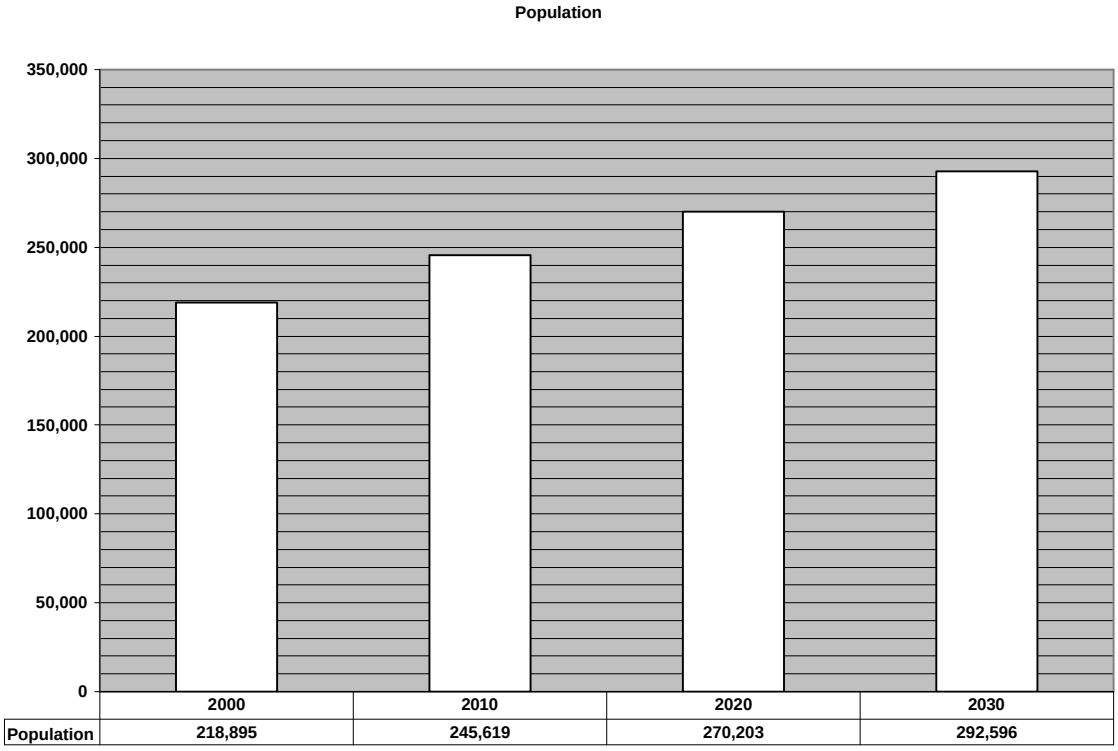
Retail Employment				
Business	**Employees**	**Adjust For Sample Size**	**Old TAZ Designation**	**New TAZ Designation**
Big Lots	22	29	402	79
Allied Discount Tire	8	10	402	80
Complete St	12	16	402	79
Shoney's	30	39	402	80
HiStyle	2	3	124	87
Sunrise Jeweler	2	3	124	87
Morvent Enterprises	7	9	124	87
Weiners	21	28	125	79
Albertsons	102	134	400	87
Stage	15	20	400	87
Waffle H	15	20	400	79
Other Employment				
LGC Library	88	116	54	7
Cajun Dome	267	352	55	54
La Icegators	38	50	55	54
Red Roof	12	16	69	209
Rodeway Inn	16	22	391	78
Fairfield Inn	19	25	76	79
Kajun Kit/L	14	18	124	79
LaQuinta Inn	20	26	402	80
Bank One	6	8	400	87
We Care Hair	13	17	400	87
Motel 6	16	21	80	213
PHI	554	730	125	124
Schools				
N Vermilion HS	65	85	addition	916
Mire Elementary	54	70	804	Duplicate entry

Table 4.1.12-2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Adjustments in Frequency of Workers to the 2000 Data Set Specific TAZs

TAZ	Original Value	New Value
7	445	561
54	146	433
55	838	306
57	24	156
69	576	560
76	444	420
78	262	284
79	109	247
80	294	348
87	559	753
124	1108	1805
125	949	191
209	105	121
213	181	202
391	820	798
400	461	262
402	268	147
804	140	70
916	0	85

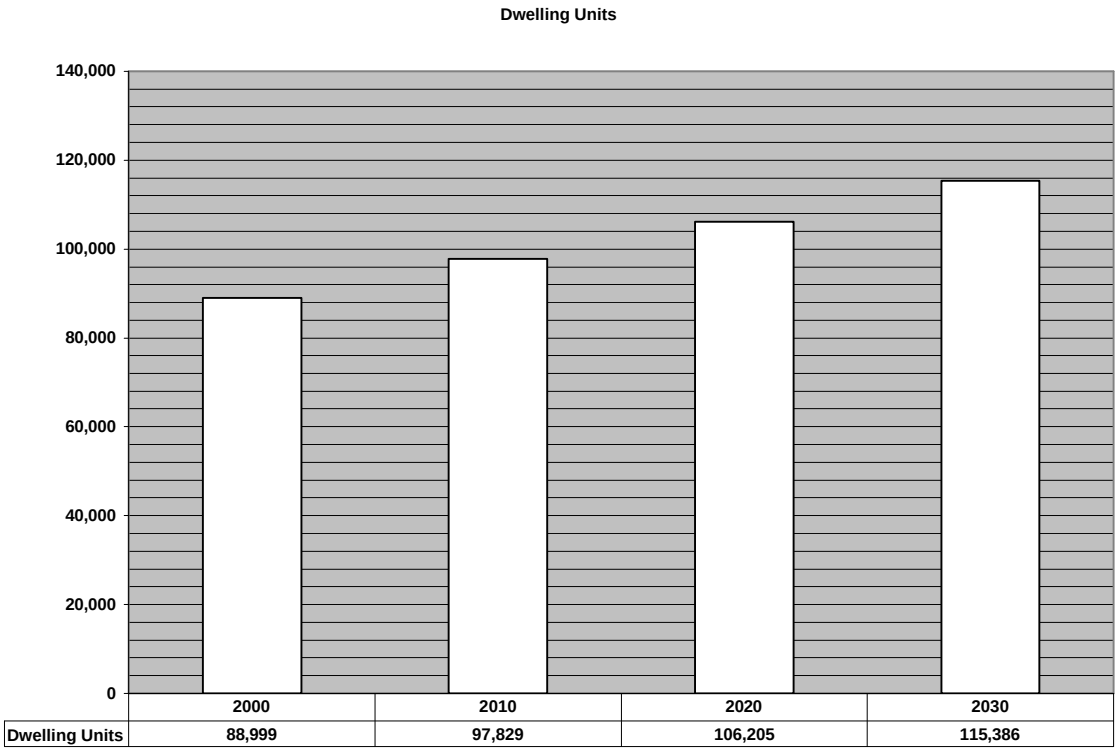
APPENDIX 1
Graphs of Variables for Study Area

GRAPH 1 – Population – 2000-2030 - Study Area

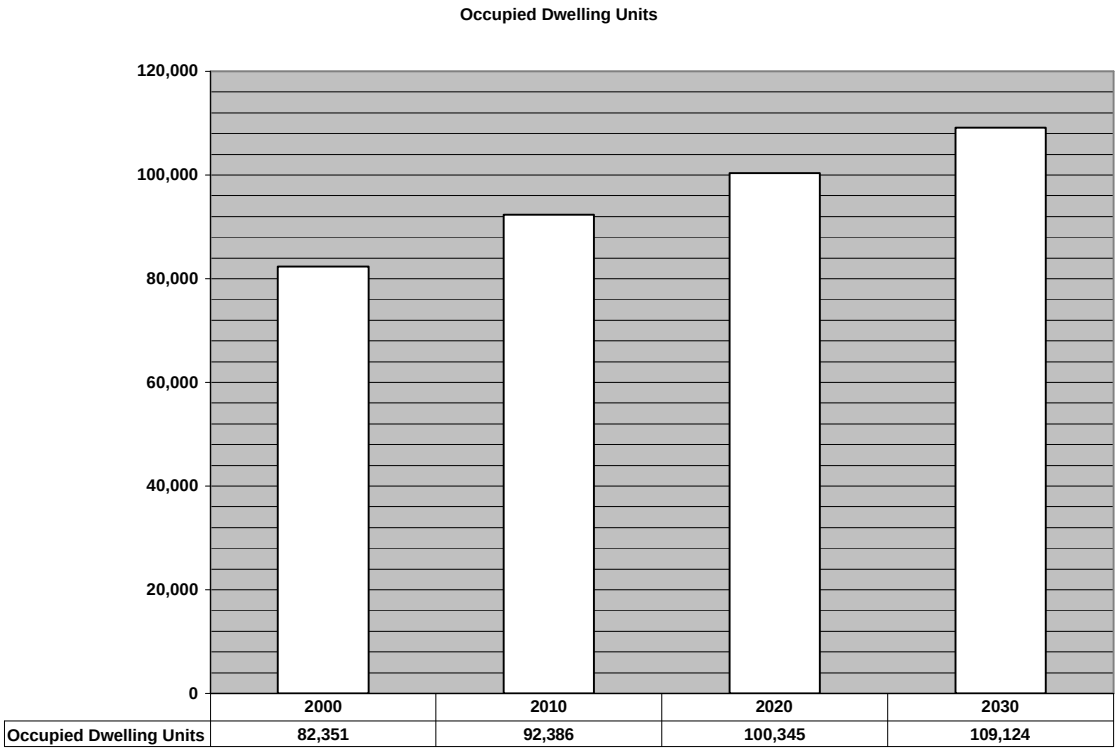


	2000	2010	2020	2030
Population	218,895	245,619	270,203	292,596

GRAPH 2 – Dwelling Units – 2000-2030 – Study Area

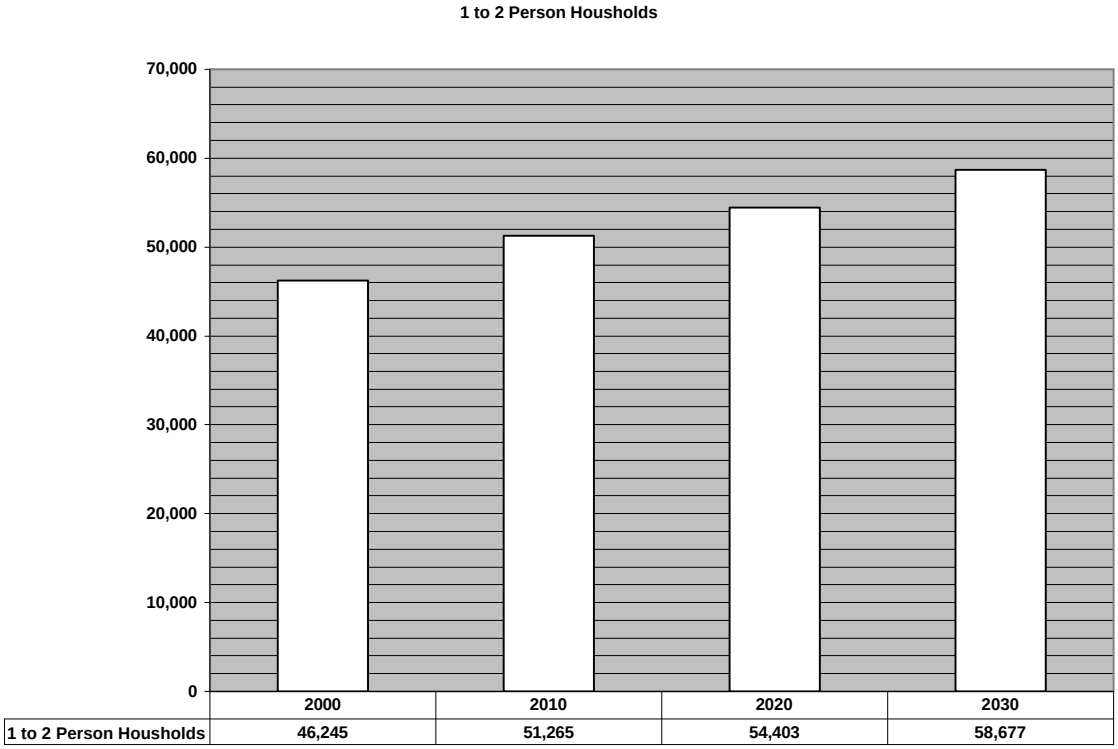


GRAPH 3 – Occupied Dwelling Units – 2000-2030 – Study Area



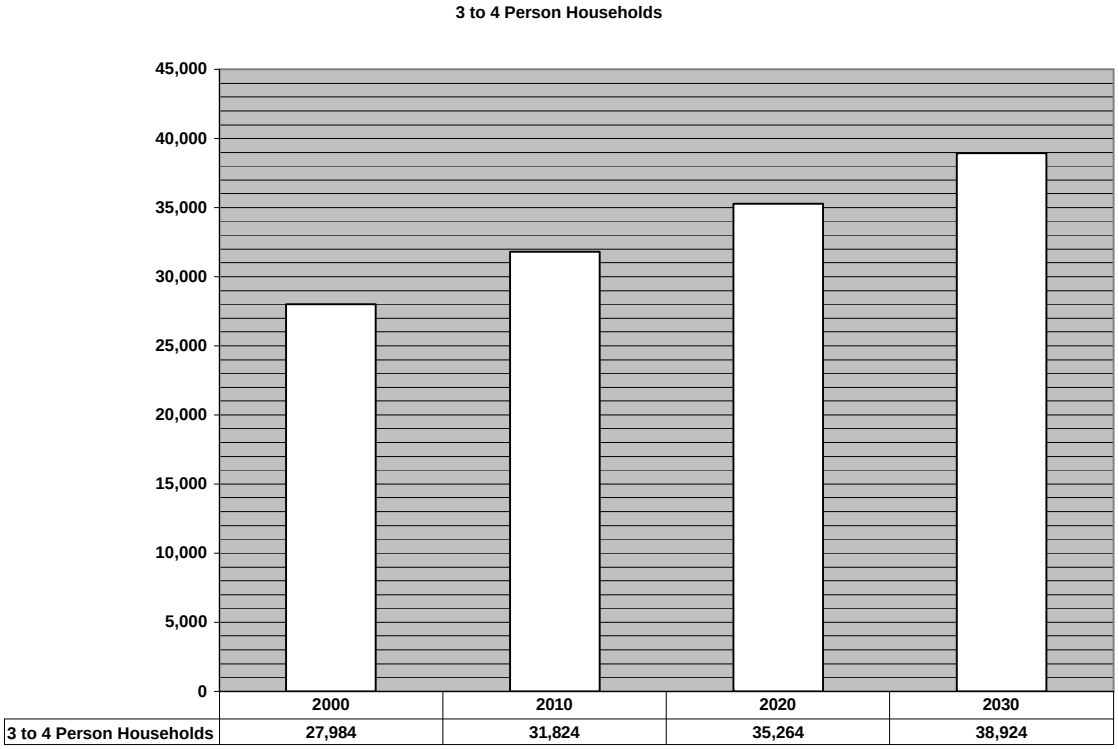
	2000	2010	2020	2030
Occupied Dwelling Units	82,351	92,386	100,345	109,124

GRAPH 4 – One and Two Person Households – 2000-2030 – Study Area



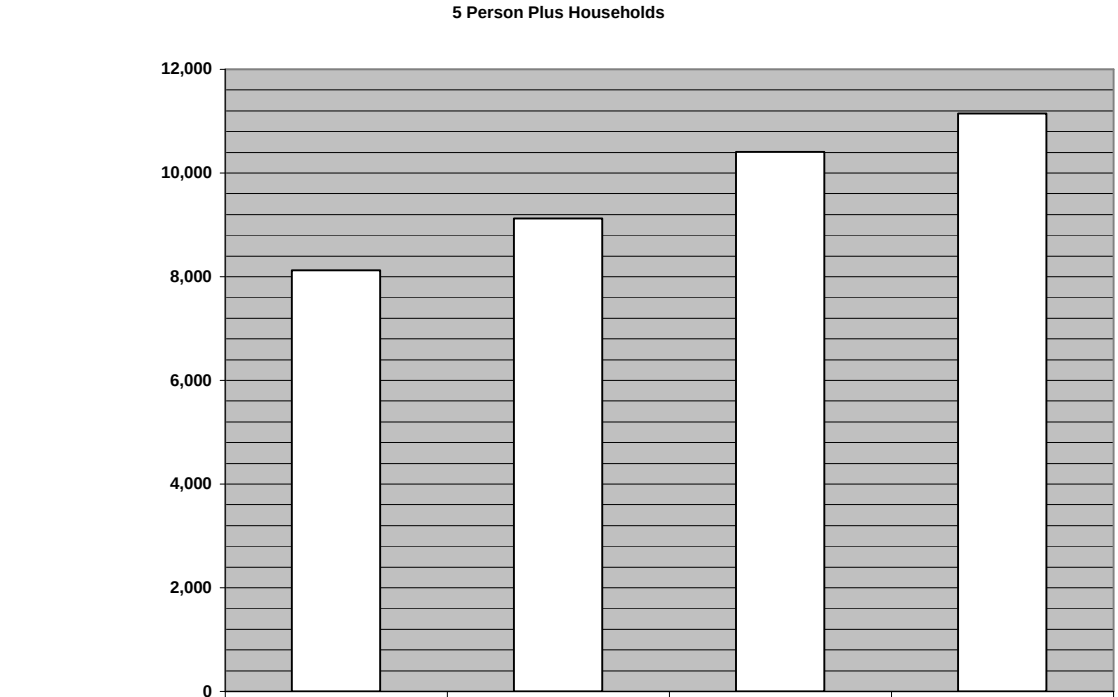
	2000	2010	2020	2030
1 to 2 Person Housholds	46,245	51,265	54,403	58,677

GRAPH 5 – Three and Four Person Households – 2000-2030 – Study Area

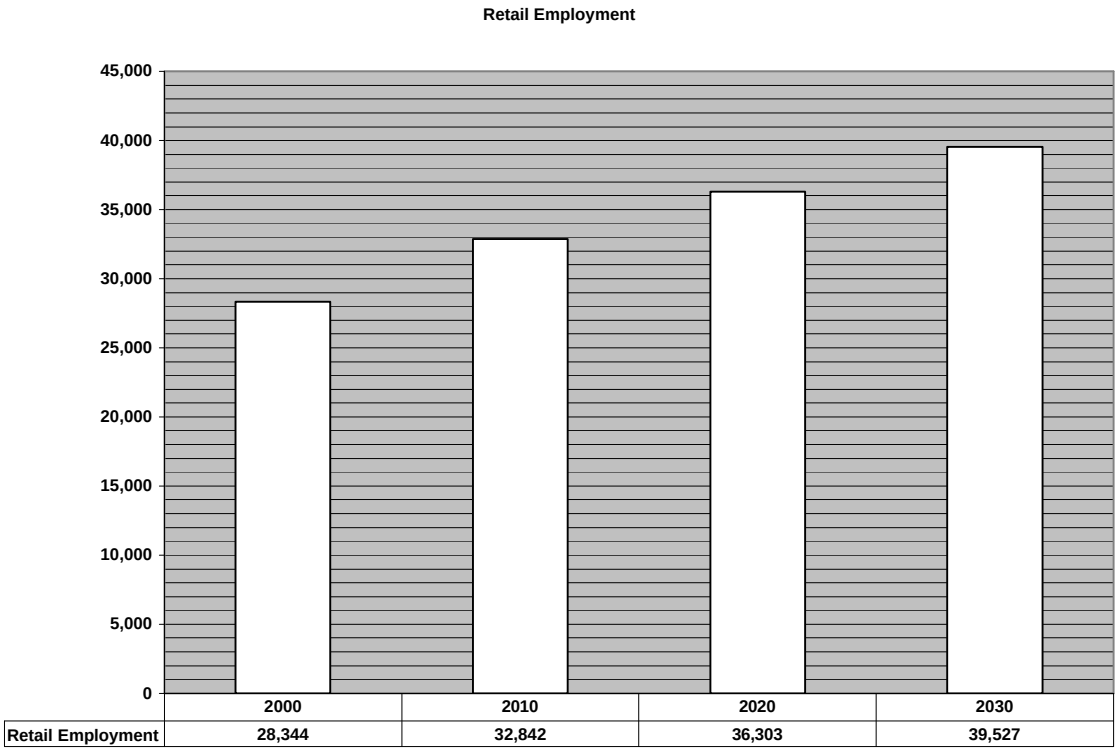


	2000	2010	2020	2030
3 to 4 Person Households	27,984	31,824	35,264	38,924

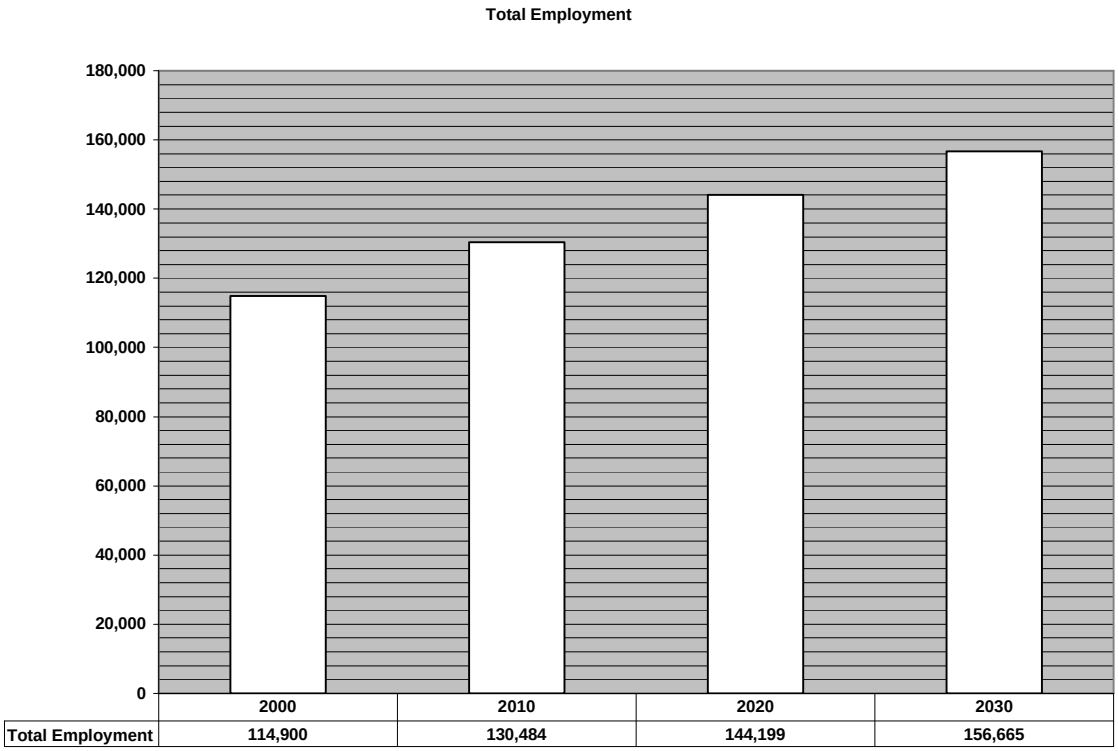
GRAPH 6 – Five Person Plus Households – 2000-2030 – Study Area



GRAPH 7 – Retail Employment – 2000-2030 – Study Area

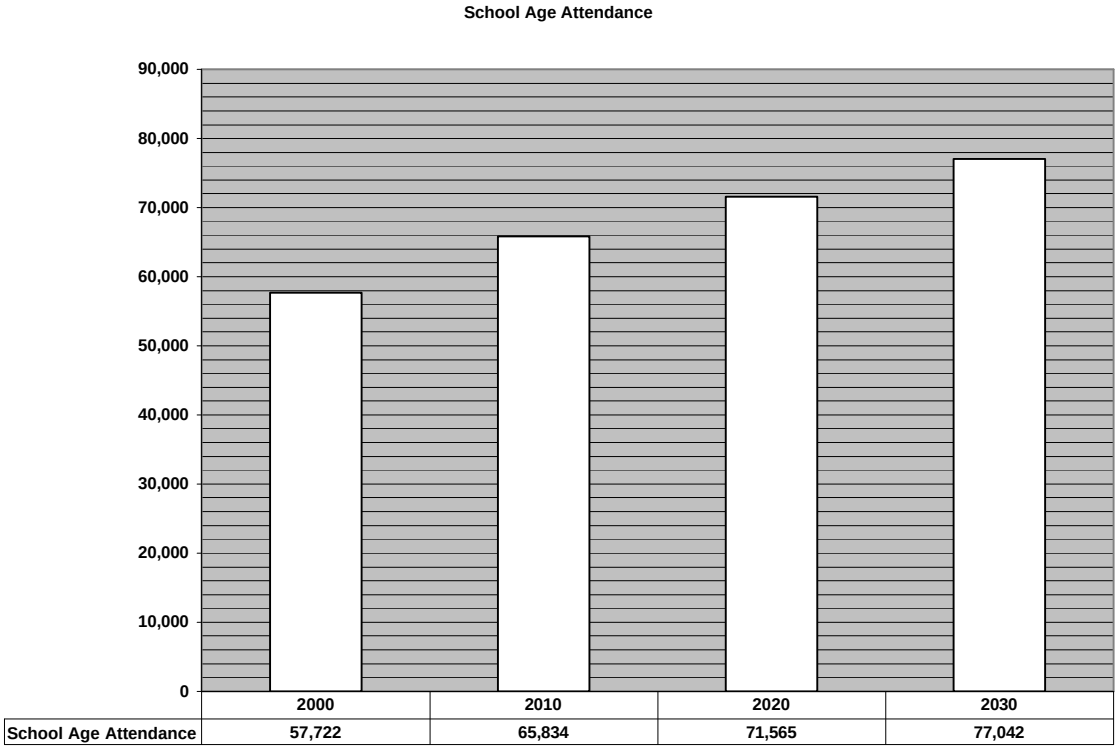


GRAPH 8 – Total Employment – 2000-2030 – Study Area



	2000	2010	2020	2030
Total Employment	114,900	130,484	144,199	156,665

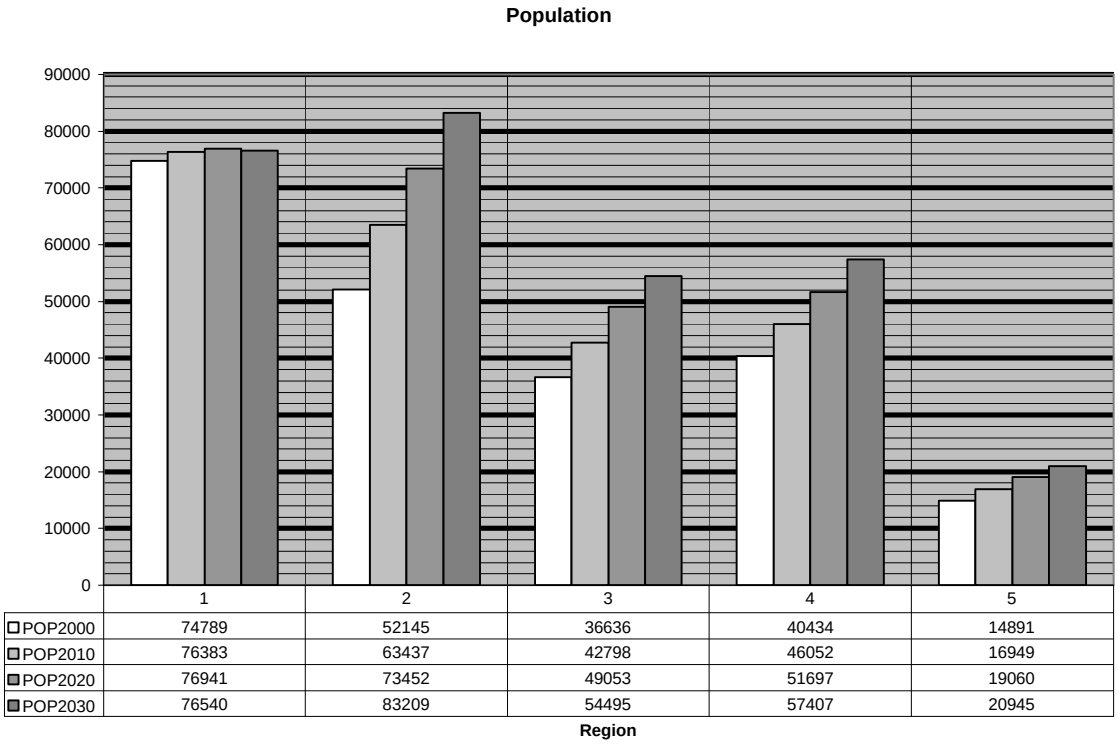
GRAPH 9 – School Attendance – 2000-2030 – Study Area



	2000	2010	2020	2030
School Age Attendance	57,722	65,834	71,565	77,042

APPENDIX 2
Graphs of Variables by Region

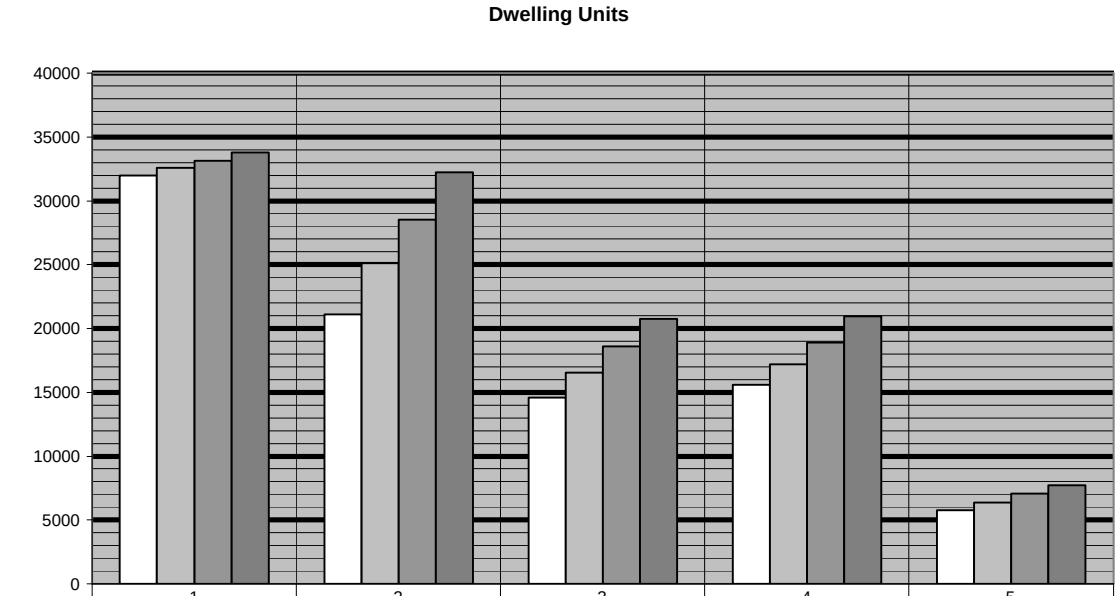
GRAPH 10 – Population – 2000-2030 – by Region



	1	2	3	4	5
POP2000	74789	52145	36636	40434	14891
POP2010	76383	63437	42798	46052	16949
POP2020	76941	73452	49053	51697	19060
POP2030	76540	83209	54495	57407	20945

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

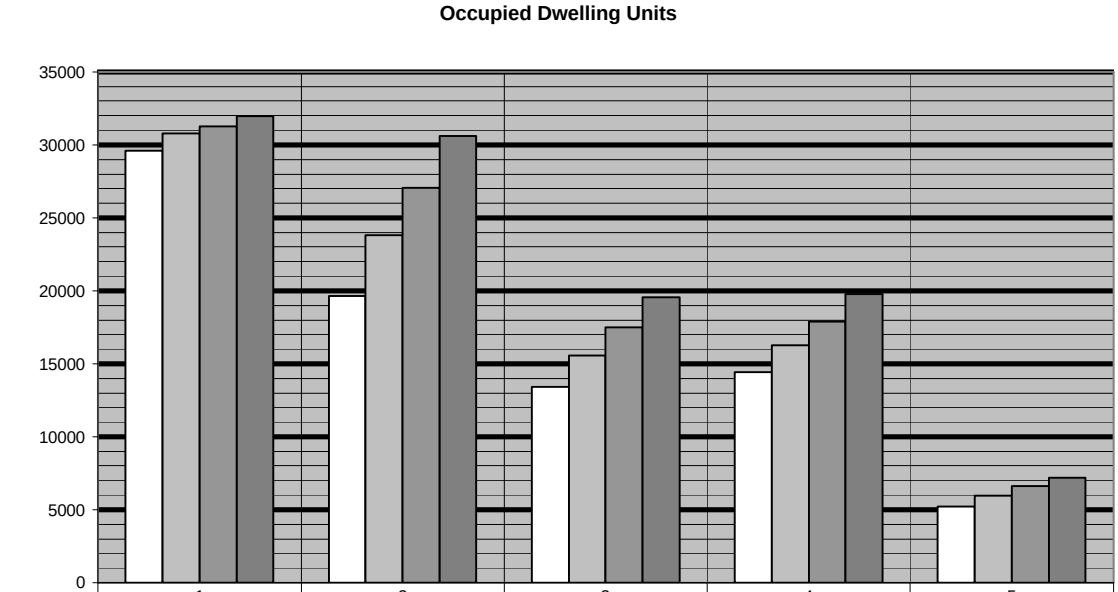
GRAPH 11 – Dwelling Units – 2000-2030 – by Region



	1	2	3	4	5
DU2000	31991	21081	14587	15597	5743
DU2010	32578	25110	16541	17209	6391
DU2020	33104	28514	18577	18925	7085
DU2030	33759	32232	20731	20961	7703

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

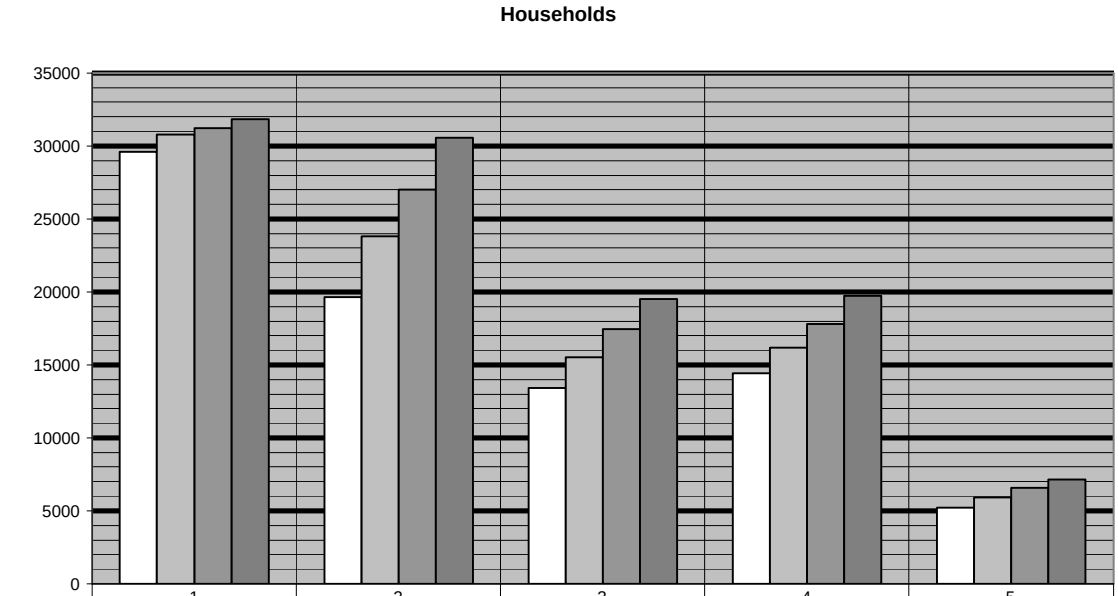
GRAPH 12 – Occupied Dwelling Units – 2000-2030 – by Region



	1	2	3	4	5
Occ2000	29621	19634	13427	14442	5227
Occ2010	30784	23812.28644	15573	16254	5962.52329
Occ2020	31281	27063.388	17513	17875	6612.579008
Occ2030	31958	30619.08316	19560	19799	7188.448137

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

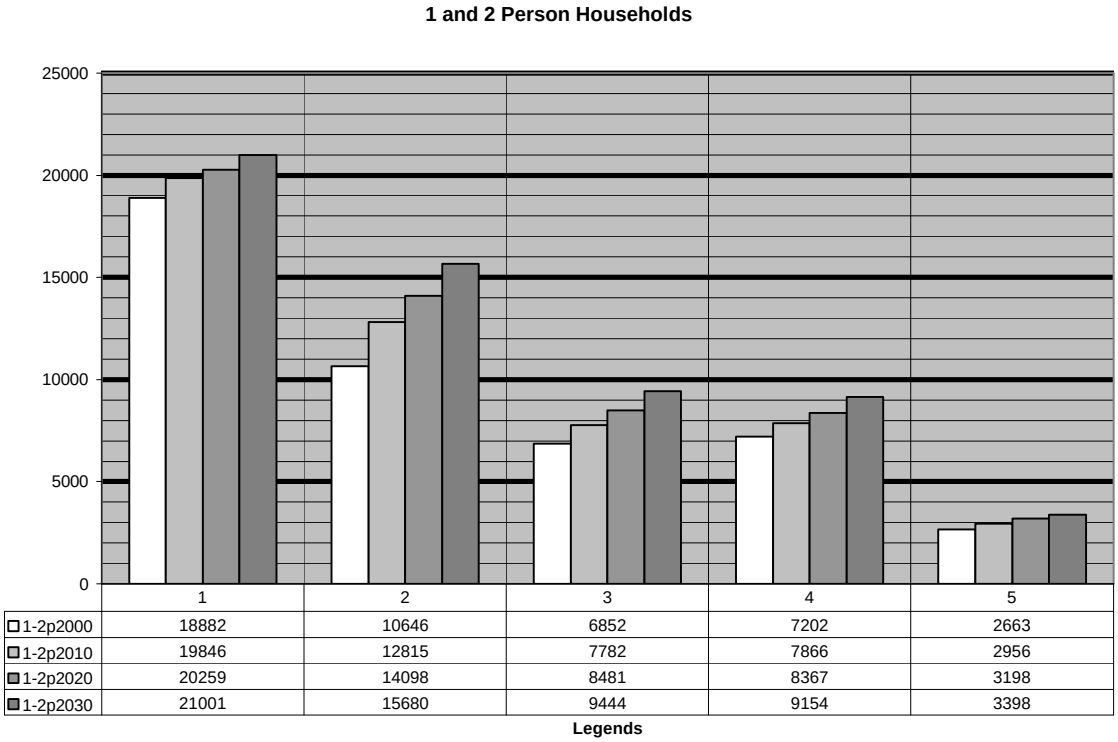
GRAPH 13 – Households – 2000-2030 – by Region



	1	2	3	4	5
HH2000	29621	19634	13427	14442	5227
HH2010	30780	23793	15518	16196	5920
HH2020	31207	27016	17448	17824	6580
HH2030	31848	30558	19504	19747	7156

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

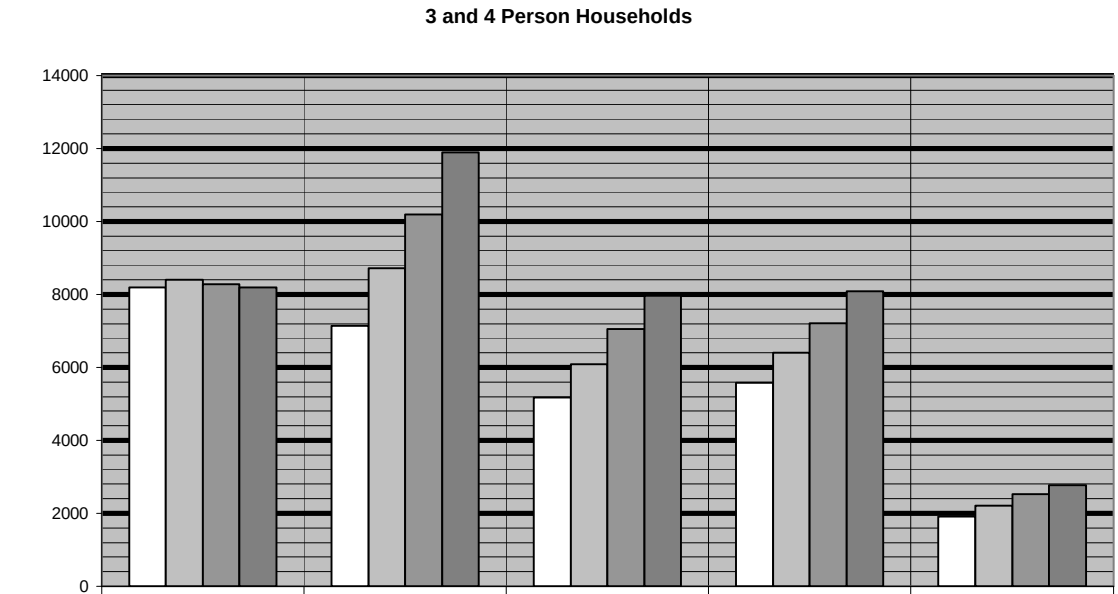
GRAPH 14 – One and Two Person Households – 2000-2030 – by Region



	1	2	3	4	5
1-2p2000	18882	10646	6852	7202	2663
1-2p2010	19846	12815	7782	7866	2956
1-2p2020	20259	14098	8481	8367	3198
1-2p2030	21001	15680	9444	9154	3398

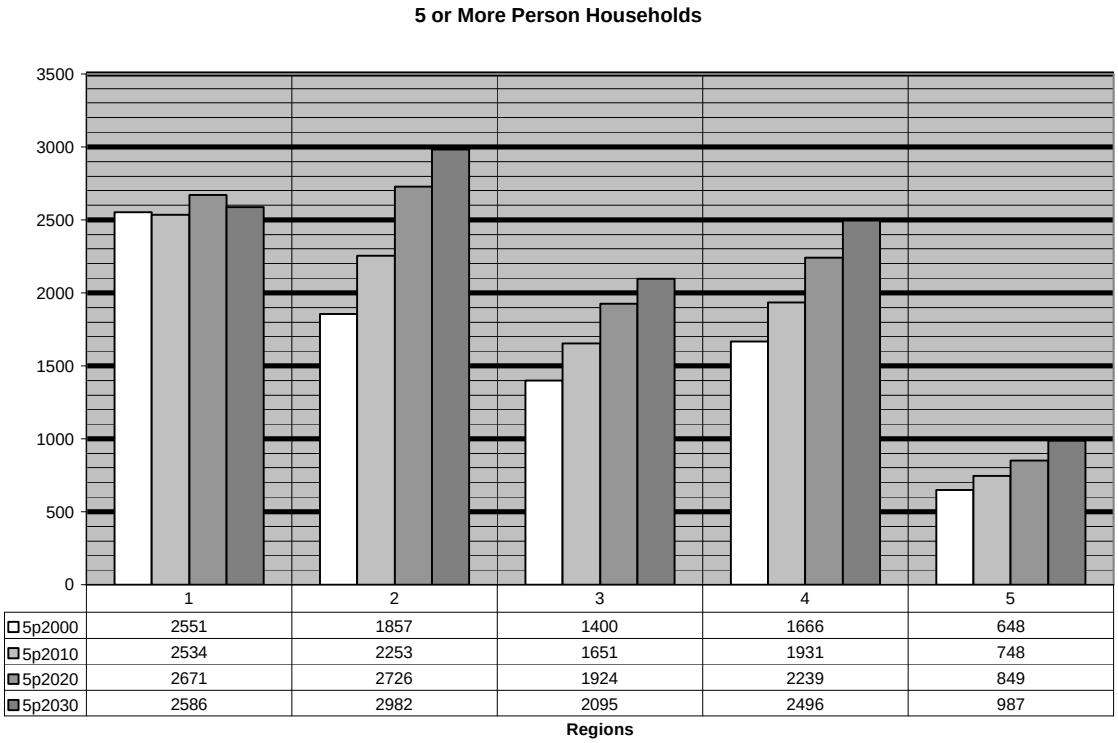
Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

GRAPH 15 – Three and Four Person Households – 2000-2030 – by Region



Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

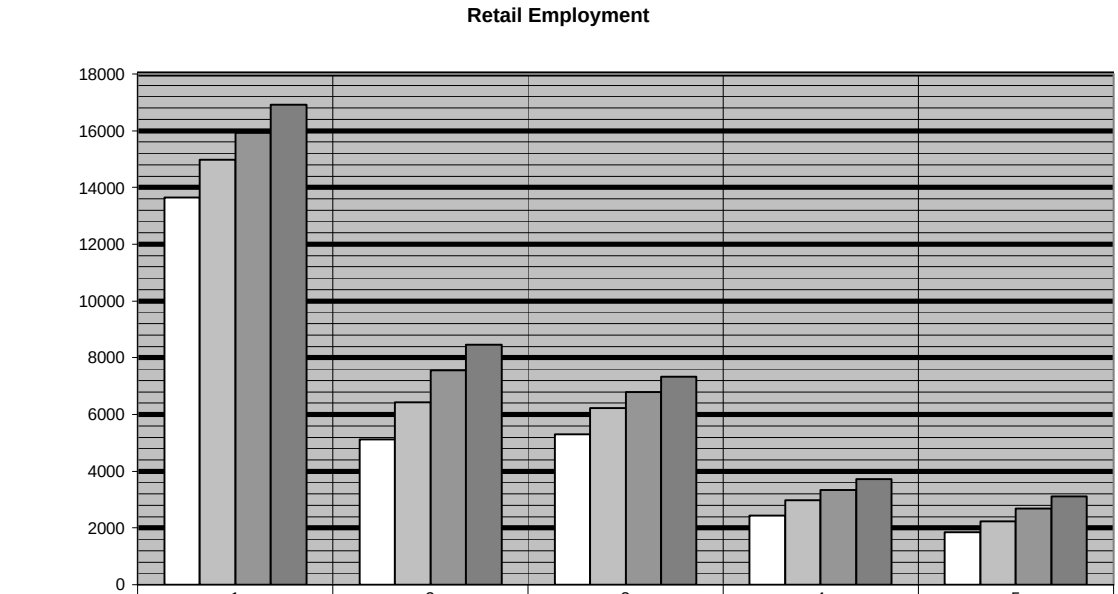
GRAPH 16 – Five Person Plus Households – 2000-2030 – by Region



	1	2	3	4	5
5p2000	2551	1857	1400	1666	648
5p2010	2534	2253	1651	1931	748
5p2020	2671	2726	1924	2239	849
5p2030	2586	2982	2095	2496	987

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

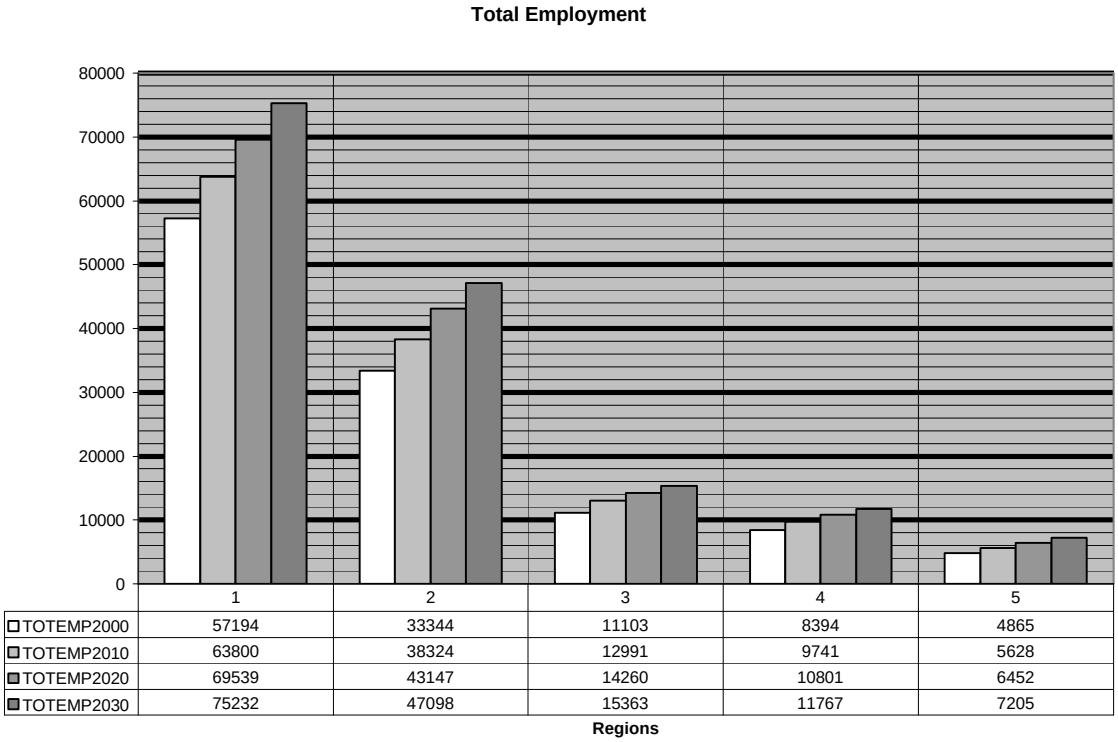
GRAPH 17 – Retail Employment – 2000-2030 – by Region



	1	2	3	4	5
RETEMP2000	13647	5117	5299	2432	1849
RETEMP2010	14973	6437	6224	2973	2235
RETEMP2020	15918	7553	6801	3345	2686
RETEMP2030	16903	8463	7326	3720	3115

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

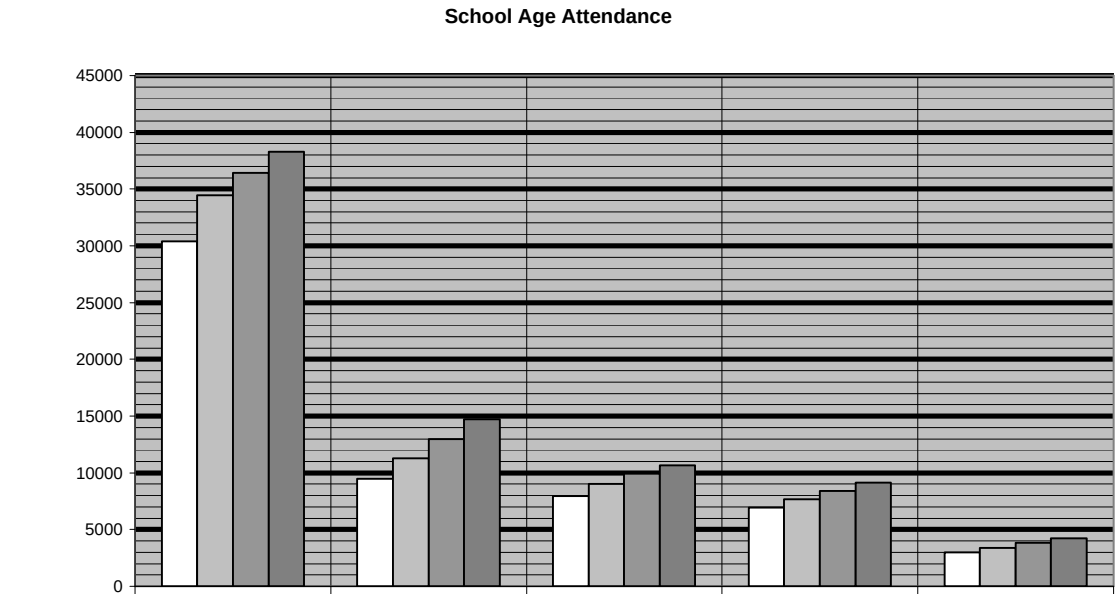
GRAPH 18 – Total Employment – 2000-2030 – by Region



	1	2	3	4	5
TOTEMP2000	57194	33344	11103	8394	4865
TOTEMP2010	63800	38324	12991	9741	5628
TOTEMP2020	69539	43147	14260	10801	6452
TOTEMP2030	75232	47098	15363	11767	7205

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

GRAPH 19 – School Attendance – 2000-2030 – by Region



	1	2	3	4	5
SCHATT2000	30390	9459	7973	6938	2962
SCHATT2010	34452	11252	9045	7693	3392
SCHATT2020	36418	13001	9897	8416	3833
SCHATT2030	38277	14720	10644	9147	4254

Regions - Map 13-2
1 = Central
2 = South
3 = West
4 = North
5 = East

A P P E N D I X 3
Demographic Maps, Variables and Formula

Appendix 3 contains three tables:

- Table 3.1: Map Number, Name, Period, and Demographic Variable
- Table 3.2: Field_ID, Variable Abbreviation, and Variable Name
- Table 3.3: Field_ID, Variable Abbreviation, and Formula

These tables are used to reference separate sets of maps and tables. The maps are thematic color maps showing the relationships of TAZ and the various demographic variables used in 2030 demographic mapping project. The maps are created in ESRI 8.X software and printed to high resolution and low resolution portable document format (PDF) files. The map tables are created in MS Excel and then exported to a data base format (DBF) as well as printed in resolution portable document format (PDF) files. The MS Excel modeling data contains only that data used to do traffic modeling. The modeling data is a subset of the map table data.

These files are available online at the following website:
http://www.lafayettelinc.net/mpo/demo/intro.asp

A concise list of files is listed below by DBF statistics file, PDF statistics file and PDF map files:

2030_demo_map_inventory_1-15_table_fomat.zip
2030_2020_2010_2000_Modeling_data.zip

2030_Demo_Table_1-2_Index.pdf
2030_Demo_Table_1-1_Title.pdf
2030_Demo_Table_1-1_1.pdf
2030_Demo_Table_1-1_2.pdf
2030_Demo_Table_1-1_3.pdf
2030_Demo_Table_1-2_4.pdf
2030_Demo_Table_1-2_5.pdf

01-0_TAZ_Numbering_Sys_new.pdf
01-1_TAZ_Numbering_Sys_new.pdf
02-1_ABS_Pop_00_10_new.pdf
02-2_ABS_Pop_10_20_new.pdf
02-3_ABS_Pop_20_30_new.pdf
02-4_PERC_Pop_00_30_new_2.pdf
02-5_Age_Distribution_new.pdf
02-6_Percent Females_new.pdf
03-1_ABS_Dwell_00_10_new.pdf
03-2_ABS_Dwell_01_20_new.pdf
03-3_ABS_Dwell_20_30_new.pdf
03-4_Percent_Dwell_00_30_new_2.pdf
04-1_ABS_1-2_House_00_10_new.pdf
04-2_ABS_1-2_House_10_20_new.pdf
04-3_ABS_1-2_House_20_30_new.pdf
04-4_Percent_1-2_House_00_30_new_2.pdf
05-1_ABS_TotEmp_00_10_new.pdf
05-2_ABS_TotEmp_10_20_new.pdf
05-3_ABS_TotEmp_20_30_new.pdf
05-4_Percent_TotEmp_00_30_new_2.pdf
6-1_ABS_RetEmp_00_10_new.pdf
6-2_ABS_RetEmp_10_20_new.pdf
6-3_ABS_RetEmp_20_30_new.pdf
6-4_Percent_RetEmp_00_30_new_2.pdf
7-1_ABS_Sch_00_10_new.pdf
7-2_ABS_Sch_10_20_new.pdf

7-3_ABS_Sch_20_30_new.pdf
7-4_Percent_Sch_00_30_new_2.pdf
8-1_Land_00_new_2.pdf
8-2_Land_10_new_2.pdf
8-3_Land_20_new_2.pdf
8-4_Land_Grow_new.pdf
9-1_Pop_Increase_Decrease_new.pdf
9-2_Pop_Increase_Decrease_new.pdf
10-1_Prox_Growth_10_20_new.pdf
10-2_Prox_Growth_20_30_new.pdf
11-1_Retail_new_2.pdf
12-1_Institution_new.pdf
13-1_Plan_SubRegions_new_2.pdf
13-2_Plan_Regions_new_2.pdf
14-1_Transp_Pop_new.pdf
15-1_Large_Tract_2010_2020_new.pdf
16-1_Multi_Fam_2010_2030_new.pdf
17_1_Pop-Pyramid.pdf

Appendix Table 3.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Map Number, Name, Period, and Demographic Variable

SHEET_NO	SHEET_NAME	BEGIN	END	VARIABLE
T-01	Title Sheet	2000		N/A
01-1	TAZ Numbering System	2000		TAZ
02-1	Population Change	2000	2010	PCH_00_10
02-2	Population Change	2010	2020	PCH_10_20
02-3	Population Change	2020	2030	PCH_20_30
02-4	Population Change	2000	2030	%POP_00_30
02-5	Age Distribution	2000		PRNCT_0_20, 20_60, 60P
02-6	Gender Distribution	2000		PRCNT_FEM
03-1	Dwelling Unit Change	2000	2010	DCH_00_10
03-2	Dwelling Unit Change	2010	2020	DCH_10_20
03-3	Dwelling Unit Change	2020	2030	DCH_20_30
03-4	Dwelling Unit Change	2000	2030	%DU_00_30
04-1	Household Change - 1 & 2 Person	2000	2010	H1-2_00_10
04-2	Household Change - 1 & 2 Person	2010	2020	H1-2_10_20
04-3	Household Change - 1 & 2 Person	2020	2030	H1-2_20_30
04-4	Household Change - 1 & 2 Person	2000	2030	%H12_00_30
05-1	Total Employment	2000	2010	ABS_TEMP_0
05-2	Total Employment	2010	2020	ABS_TEMP_1
05-3	Total Employment	2020	2030	ABS_TEMP_2
05-4	Total Employment	2000	2030	%T_EM00_30
06-1	Retail Employment	2000	2010	ABS_RET_00
06-2	Retail Employment	2010	2020	ABS_RET_10
06-3	Retail Employment	2020	2030	ABS_RET_20
06-4	Retail Employment	2000	2030	%R_EM00_30
07-1	School Attendance Change	2000	2010	CH_00_10
07-2	School Attendance Change	2010	2020	CH_10_20
07-3	School Attendance Change	2020	2030	CH_20_30
07-4	School Attendance Change	2000	2030	%SH_00_30
08-1	Land Availability	2000		CAT_00
08-2	Land Availability	2010		CAT_10

Appendix Table 3.1
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Map Number, Name, Period, and Demographic Variable

08-3	Land Availability	2020		CAT_20
08-4	Land Availability from 70% - 80% Growth	2010	2020	CAT_GROW
09-1	Population: Births & Deaths	2000	2030	B_D_CAT
09-2	Population Growth	2000	2030	POP_00_30
10-1	Proximity to Population Growth	2010	2020	PROX-20
10-2	Proximity to Population Growth	2020	2030	PROX-30
11-1	Retail Service Areas	2000	2030	RETAILCENT
12-1	Institutional Populations	2000	2030	INSTITUTIO
13-1	Planning Sub-Regions	2000	2030	REGION
13-2	Planning Regions	2000	2030	SUBREGION
14-1	Transportation Population Growth	2000	2030	TRANSP-30
15-1	Large Tracts of Undeveloped Real Estate	2000	2030	LARGETRACT
16-1	Potential Multi-Family Unit Growth	2000	2030	MULTI-FAMI
17-1	Population Pyramids and Tables	2000	2030	N/A

Appendix Table 3.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Map Field_ID, Variable Abbreviation, and Variable Name

FIELD_ID	VARIABLE ABBREVIATION	VARIABLE NAME
1	TAZ	TRAFFIC ANALYSIS ZONE
2	POP2000	POPULATION IN 2000
3	POP2010	POPULATION IN 2010
4	POP2020	POPULATION IN 2020
5	POP2030	POPULATION IN 2030
6	POP_00_30	POPULATION CHANGE 2000 TO 2030
7	PCH_00_10	POPULATION CHANGE 2000 TO 2010
8	PCH_10_20	POPULATION CHANGE 2010 TO 2020
9	PCH_20_30	POPULATION CHANGE 2020 TO 2030
10	DU2000	DWELLING UNITS IN 2000
11	DU2010	DWELLING UNITS IN 2010
12	DU2020	DWELLING UNITS IN 2020
13	DU2030	DWELLING UNITS IN 2030
14	DCH_00_10	DWELLING UNIT CHANGE 2000 TO 2010
15	DCH_10_20	DWELLING UNIT CHANGE 2010 TO 2020
16	DCH_20_30	DWELLING UNIT CHANGE 2020 TO 2030
17	Occ2000	OCCUPIED DWELLINGS 2000
18	Occ2010	OCCUPIED DWELLINGS 2010
19	Occ2020	OCCUPIED DWELLINGS 2020

Appendix Table 3.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Map Field_ID, Variable Abbreviation, and Variable Name

20	Occ2030	OCCUPIED DWELLINGS 2030
21	H1-2_00_10	1 TO 2 PERSON HOUSEHOLD CHANGE 2000 TO 2010
22	H1-2_10_20	1 TO 2 PERSON HOUSEHOLD CHANGE 2010 TO 2020
23	H1-2_20_30	1 TO 2 PERSON HOUSEHOLD CHANGE 2020 TO 2030
24	1-2p2000	1 TO 2 PERSON HOUSEHOLD CHANGE IN 2000
25	3-4p2000	3 TO 4 PERSON HOUSEHOLD CHANGE IN 2000
26	5p2000	5 PLUS PERSON HOUSEHOLD IN 2000
27	HH2000	TOTAL HOUSEHOLDS IN 2000
28	1-2p2010	1 TO 2 PERSON HOUSEHOLD CHANGE IN 2010
29	3-4p2010	3 TO 4 PERSON HOUSEHOLD CHANGE IN 2010
30	5p2010	5 PLUS PERSON HOUSEHOLD IN 2010
31	HH2010	TOTAL HOUSEHOLDS IN 2010
32	1-2p2020	1 TO 2 PERSON HOUSEHOLD CHANGE IN 2020
33	3-4p2020	3 TO 4 PERSON HOUSEHOLD CHANGE IN 2020
34	5p2020	5 PLUS PERSON HOUSEHOLD IN 2020
35	HH2020	TOTAL HOUSEHOLDS IN 2020
36	1-2p2030	1 TO 2 PERSON HOUSEHOLD CHANGE IN 2030
37	3-4p2030	3 TO 4 PERSON HOUSEHOLD CHANGE IN 2030
38	5p2030	5 PLUS PERSON HOUSEHOLD IN 2030
39	HH2030	TOTAL HOUSEHOLDS IN 2030
40	TOTEMP2000	TOTAL EMPLOYMENT IN 2000
41	TOTEMP2010	TOTAL EMPLOYMENT IN 2010
42	TOTEMP2020	TOTAL EMPLOYMENT IN 2020
43	TOTEMP2030	TOTAL EMPLOYMENT IN 2030
44	ABS_TEMP_0	ABSOLUTE TOTAL EMPLOYMENT CHANGE 2000 TO 2010
45	ABS_TEMP_1	ABSOLUTE TOTAL EMPLOYMENT CHANGE 2010 TO 2020
46	ABS_TEMP_2	ABSOLUTE TOTAL EMPLOYMENT CHANGE 2020 TO 2030
47	RETEMP2000	RETAIL EMPLOYMENT IN 2000
48	RETEMP2010	RETAIL EMPLOYMENT IN 2010
49	RETEMP2020	RETAIL EMPLOYMENT IN 2020
50	RETEMP2030	RETAIL EMPLOYMENT IN 2030
51	ABS_RET_00	RETAIL EMPLOYMENT CHANGE 2000 TO 2010
52	ABS_RET_10	RETAIL EMPLOYMENT CHANGE 2010 TO 2020
53	ABS_RET_20	RETAIL EMPLOYMENT CHANGE 2020 TO 2030
54	SCHATT2000	SCHOOL AGE ATTENDANCE IN 2000
55	SCHATT2010	SCHOOL AGE ATTENDANCE IN 2010
56	SCHATT2020	SCHOOL AGE ATTENDANCE IN 2020
57	SCHATT2030	SCHOOL AGE ATTENDANCE IN 2030
58	POP_CHK1	POPULATION 2000 CHECK TOTAL
59	CH_00_10	SCHOOL AGE ATTENDANCE CHANGE 2000 TO 2010
60	CH_10_20	SCHOOL AGE ATTENDANCE CHANGE 2010 TO 2020

Appendix Table 3.2
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Map Field_ID, Variable Abbreviation, and Variable Name

61	CH_20_30	SCHOOL AGE ATTENDANCE CHANGE 2020 TO 2030
62	CAT_00	LAND AVAILABILITY IN 2000
63	CAT_10	LAND AVAILABILITY IN 2010
64	CAT_20	LAND AVAILABILITY IN 2020
65	CAT_GROW	LAND AVAILABILITY 2010 & 2020 FROM 70% 80% GROWTH
66	B_D_CAT	POPULATION CHANGE 2000 TO 2030 -BIRTHS & DEATHS
67	PROX-20	PROXIMITY TO GROWING TAZ IN 2020
68	PROX-30	PROXIMITY TO GROWING TAZ IN 2030
69	RETAILCENT	RETAIL CENTERS
70	INSTITUTIO	INSTITUTIONS
71	REGION	PLANNING REGIONS
72	SUBREGION	PLANNING SUBREGIONS
73	TRANSP-10	TRANSPORTATION INFLUENCE POPULATION IN 2010
74	TRANSP-20	TRANSPORTATION INFLUENCE POPULATION IN 2020
75	TRANSP-30	TRANSPORTATION INFLUENCE POPULATION IN 2030
76	LARGETRACT	LARGE TRACTS OF REAL ESTATE
77	MULTI-FAMI	MULTI-FAMILY DWELLINGS
78	POP_CHK2	POPULATION 2000 CHECK TOTAL
79	%POP_00_30	PERCENT POPULATION CHANGE 2000 TO 2030
80	%DU_00_30	PERCENT DWELLING UNIT CHANGE 2000 TO 2030
81	%T_EM00_30	PERCENT TOTAL EMPLOYMENT CHANGE 2000 TO 2030
82	%R_EM00_30	PERCENT RETAIL EMPLOYMENT CHANGE 2000 TO 2030
83	%SH_00_30	PERCENT SCHOOL AGE ATTENDANCE CHANGE 2000- 2030
84	%H12_00_30	PERCENT 1 -2 PERSON HOUSEHOLD CHANGE 2000 - 2030
85	SQ_MILE	AREA OF TAZ IN SQUARE MILES
86	PRNCT_0_20	PERCENT OF POPULATION AGE 0 TO 20 -- 2000
87	PRNCT_20_6	PERCENT OF POPULATION AGE 20 TO 60 -- 2000
88	PRNCT_60_P	PERCENT OF POPULATION AGE 60 PLUS -- 2000
89	PRCNT_FEM	PERCENT FEMALE
90	F_0_20	FEMALE AGE 0 TO 20
91	F_20_60	FEMALE AGE 20 TO 60
92	F_60_PLUS	FEMALE AGE 60 PLUS
93	PRCNT_MALE	PERCENT MALE
94	M_0_20	MALE AGE 0 TO 20
95	M_20_60	MALE AGE 20 TO 60
96	M_60_PLUS	MALE AGE 60 PLUS
97	TAZ_CHK	TRAFFIC ANALYSIS ZONE CHECK; COMPARE TAZ
98	SUM_ALL	VARIABLE SUM BY TAZ; STATISTICAL TABLES ONLY

Appendix Table 3.3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Field_ID, Variable Abbreviation, and Formula

FIELD_ID	VARIABLE ABBREVIATION	FORMULA
1	TAZ	N/A
2	POP2000	N/A
3	POP2010	N/A
4	POP2020	N/A
5	POP2030	N/A
6	POP_00_30	POP2030-POP2000
7	PCH_00_10	P0P2000 - POP2010
8	PCH_10_20	P0P2010 - POP2020
9	PCH_20_30	P0P2030 - POP2020
10	DU2000	N/A
11	DU2010	N/A
12	DU2020	N/A
13	DU2030	N/A
14	DCH_00_10	DU2000 - DU2010
15	DCH_10_20	DU2010 - DU2020
16	DCH_20_30	DU2030 - DU2020
17	Occ2000	N/A
18	Occ2010	N/A
19	Occ2020	N/A
20	Occ2030	N/A
21	H1-2_00_10	H1-2_10 less H1-2_00
22	H1-2_10_20	H1-2_20 less H1-2_10
23	H1-2_20_30	H1-2_30 less H1-2_20
24	1-2p2000	N/A
25	3-4p2000	N/A
26	5p2000	N/A
27	HH2000	N/A
28	1-2p2010	N/A
29	3-4p2010	N/A
30	5p2010	N/A
31	HH2010	N/A
32	1-2p2020	N/A
33	3-4p2020	N/A
34	5p2020	N/A
35	HH2020	N/A
36	1-2p2030	N/A
37	3-4p2030	N/A
38	5p2030	N/A
39	HH2030	N/A

Appendix Table 3.3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Field_ID, Variable Abbreviation, and Formula

40	TOTEMP2000	N/A
41	TOTEMP2010	N/A
42	TOTEMP2020	N/A
43	TOTEMP2030	N/A
44	ABS_TEMP_0	TOTEMP2010-TOTEMP2000
45	ABS_TEMP_1	TOTEMP2020-TOTEMP2010
46	ABS_TEMP_2	TOTEMP2030-TOTEMP2020
47	RETEMP2000	N/A
48	RETEMP2010	N/A
49	RETEMP2020	N/A
50	RETEMP2030	N/A
51	ABS_RET_00	RETEMP2010-RETEMP2000
52	ABS_RET_10	RETEMP2020-RETEMP2010
53	ABS_RET_20	RETEMP2030-RETEMP2020
54	SCHATT2000	N/A
55	SCHATT2010	N/A
56	SCHATT2020	N/A
57	SCHATT2030	N/A
58	POP_CHK1	POP2000 & POP_CHK2
59	CH_00_10	SCHATT2010-SCHATT2000
60	CH_10_20	SCHATT2020-SCHATT2010
61	CH_20_30	SCHATT2030-SCHATT2020
62	CAT_00	N/A
63	CAT_10	N/A
64	CAT_20	N/A
65	CAT_GROW	0 = not 70%-80% change; 1= 70%-80% change in 2010; 2 = 70%-80% change in 2020
66	B_D_CAT	N/A
67	PROX-20	N/A
68	PROX-30	N/A
69	RETAILCENT	N/A
70	INSTITUTIO	N/A
71	REGION	N/A
72	SUBREGION	N/A
73	TRANSP-10	N/A
74	TRANSP-20	N/A
75	TRANSP-30	N/A
76	LARGETRACT	N/A
77	MULTI-FAMI	N/A
78	POP_CHK2	POP2000 & POP_CHK1
79	%POP_00_30	(P0P2030 - POP2000) / POP2000
80	%DU_00_30	(DU2030 - DU2000) / DU2000
81	%T_EM00_30	(TOTEMP2030 - TOTEMP2000) / TOTEMP2000
82	%R_EM00_30	(RETMP2030 - RETMP2000) / TOTEMP2000

Appendix Table 3.3
Lafayette Metropolitan Planning Organization
2030 Transportation Plan
Field_ID, Variable Abbreviation, and Formula

83	%SH_00_30	(SCHATT2030 - SCHATT2000) / SCHATT2000
84	%H12_00_30	(H1-2_30 - H1-2_00) / H1-2_00
85	SQ_MILE	640 ACRES = 1 SQ MILE; 43560 SQ FT = 1 ACRE
86	PRNCT_0_20	(F_0_20 + M_0_20) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
87	PRNCT_20_6	(F_20_60 +M_20_60) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
88	PRNCT_60_P	(F_60_P+ M_60_P) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
89	PRCNT_FEM	(F_0_20 + F_20_60 + F_60_P) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
90	F_0_20	(M_0_20) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
91	F_20_60	(M_20_60) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
92	F_60_PLUS	(M_60_P) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
93	PRCNT_MALE	(M_0_20 + M_20_60 + M_60_P) / ((F_0_20 + F_20_60 + F_60_P) + (M_0_20 + M_20_60 + M_60_P))
94	M_0_20	N/A
95	M_20_60	N/A
96	M_60_PLUS	N/A
97	TAZ_CHK	N/A
98	SUM_ALL	SUM OF ALL NUMERIC VARIABLES

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